Shopping; LikeFollow

Save on a refurbished Samsung monitor that's great for gaming

StackCommerce 252 words 29 April 2021 Mashable.com MASHABLE English

Copyright 2021, Mashable, Inc. All Rights Reserved. Distributed by NewsBank Inc.

TL;DR: Boost your video game experience with the Samsung 27-inch SR35 FHD Monitor, on sale for 28% off. As of April 29, grab one for only \$179.99.

If you have high-end video games that just look flat and lifeless on your old monitor, it's time for an upgrade.

With this refurbished Samsung 27-inch SR35 FHD Monitor, you'll get the upgrade you didn't realize you needed. The simple bezel-less design and display is perfect for dual-monitor setups, and each scene you stream comes to life with Optima color setting options and sharp image contrast.

Why is the screen so good for video games in particular? Aside from the clarity, this Samsung model features a game mode that adjusts any game you decide to play to fit the screen.

In addition to game mode, it also features an eye saver mode, which will minimize the amount of blue light emitted.

Your connection options are plentiful, with HDMI and D-Sub ports that are quick, convenient, and require zero setup. It's no wonder why this versatile monitor earned 4.6 out of 5 stars on Amazon.

Normally, a brand-new Samsung SR35 monitor would cost you \$249, but for a limited time, you can slash nearly 30% off that price and pay just \$179.99 for this refurbished model.

Samsung 27" SR35 FHD Monitor (Certified Refurbished) — \$179.99 See Details

Document MASHABLE20210430eh4t0000d



Samsung unveils a specced-out, slim gaming laptop that you probably can't get

Oscar Gonzalez 204 words 29 April 2021 CNET News.com CNEWSN English

(c) CNET Networks Inc. All Rights Reserved.

Samsung hosted an <u>Unpacked 2021 event</u> Wednesday to show off its latest <u>Galaxy Book Pro</u>. As a surprise, the company also revealed the return of its gaming laptop line, though Samsung might not release it in the US.

The Galaxy Book Odyssey is Samsung's gaming-focused 15.6-inch laptop powered by an 11th-gen Intel Core H Series processor and an Nvidia RTX 3050Ti GPU. It also will have up to 32GB of RAM, up to 2TB of solid-state storage and an enhanced cooling system, and it will come in Mystic Black.

Click to view image.

Samsung's Galaxy Book Odyssey has a lot of power when it comes out in August for the starting price of \$1,399. However, it's only available in select markets, and that does not currently include the US. <u>Samsung started the Odyssey gaming line in 2017</u> but has done little with it in the past couple of years, especially in the US.

Click to view image.

A new gaming laptop is coming. | Screenshot by CNET | The specs for the upcoming Galaxy Book Odyssey. | Samsung/Screenshot by Oscar Gonzalez/CNET

Document CNEWSN0020210429eh4t0005y



Samsung Electronics Co. Ltd. Patent Issued for Guided View Mode For Virtual Reality (USPTO 10,976,982)

4,164 words 27 April 2021 Information Technology Newsweekly INTEWK 3335 English

© Copyright 2021 Information Technology Newsweekly via VerticalNews.com

2021 APR 27 (VerticalNews) -- By a News Reporter-Staff News Editor at Information Technology Newsweekly -- A patent by the inventors Rochford, Ciaran (Bellevue, WA); Harscoet, Philippe (Bellevue, WA); Li, Xiaoguang (Santa Clara, CA), filed on February 2, 2018, was published online on April 26, 2021, according to news reporting originating from Alexandria, Virginia, by VerticalNews correspondents.

Patent number 10,976,982 is assigned to Samsung Electronics Co. Ltd. (Suwon-si, South Korea).

The following quote was obtained by the news editors from the background information supplied by the inventors: "Virtual reality headsets are increasingly common, and in many environments, it may be desirable to be able to share the virtual reality experience with others. However, the virtual reality environment created by virtual reality headsets is isolated, and it can be difficult to share an immersive virtual reality experience with others."

In addition to the background information obtained for this patent, VerticalNews journalists also obtained the inventors' summary information for this patent: "Embodiments of the present disclosure provide systems and methods for sharing a virtual reality environment between one or more master devices and one or more follower devices.

"In one embodiment, a head mounted display (HMD) is disclosed. The HMD includes a transceiver, a display, and a processor coupled to the transceiver and display. The processor is configured to control the transceiver to receive, from at least one other HMD, data related to a field of view (FOV) of the at least one other HMD in a virtual reality (VR) environment. The processor is further configured to generate, using the data related to the FOV of the at least one other HMD, an FOV of the HMD in the VR environment.

"In another embodiment, another head mounted display (HMD) is disclosed. The HMD includes a transceiver, a display, and a processor coupled to the transceiver and display. The processor is configured to control the transceiver to transmit, to at least one other HMD, data related to a field of view (FOV) of the HMD in a virtual reality (VR) environment, wherein the data related to the FOV of the HMD is used to generate an FOV of the at least one other HMD in the VR environment.

"Other technical features may be readily apparent to one skilled in the art from the following figures, descriptions, and claims.

"Before undertaking the DETAILED DESCRIPTION below, it may be advantageous to set forth definitions of certain words and phrases used throughout this patent document. The term 'couple' and its derivatives refer to any direct or indirect communication between two or more elements, whether or not those elements are in physical contact with one another. The terms 'transmit,' 'receive,' and 'communicate,' as well as derivatives thereof, encompass both direct and indirect communication. The terms 'include' and 'comprise,' as well as derivatives thereof, mean inclusion without limitation. The term 'or' is inclusive, meaning and/or. The phrase 'associated with,' as well as derivatives thereof, means to include, be included within, interconnect with, contain, be contained within, connect to or with, couple to or with, be communicable with, cooperate with, interleave, juxtapose, be proximate to, be bound to or with, have, have a property of, have a relationship to or with, or the like. The term 'controller' means any device, system or part thereof that controls at least one operation. Such a controller may be implemented in hardware or a combination of hardware and software and/or firmware. The functionality associated with any particular controller may be centralized or distributed, whether locally or remotely. The phrase 'at least one of,' when used with a list of items, means that different combinations of one or more of the listed items may be used, and only one item in the list may be needed. For example, 'at least one of: A, B, and C' includes any of the following combinations: A, B, C, A and B, A and C, B and C, and A and B and C.

"Moreover, various functions described below can be implemented or supported by one or more computer programs, each of which is formed from computer readable program code and embodied in a computer

readable medium. The terms 'application' and 'program' refer to one or more computer programs, software components, sets of instructions, procedures, functions, objects, classes, instances, related data, or a portion thereof adapted for implementation in a suitable computer readable program code. The phrase 'computer readable program code' includes any type of computer code, including source code, object code, and executable code. The phrase 'computer readable medium' includes any type of medium capable of being accessed by a computer, such as read only memory (ROM), random access memory (RAM), a hard disk drive, a compact disc (CD), a digital video disc (DVD), or any other type of memory. A 'non-transitory' computer readable medium excludes wired, wireless, optical, or other communication links that transport transitory electrical or other signals. A non-transitory computer readable medium includes media where data can be permanently stored and media where data can be stored and later overwritten, such as a rewritable optical disc or an erasable memory device.

"Definitions for other certain words and phrases are provided throughout this patent document. Those of ordinary skill in the art should understand that in many if not most instances, such definitions apply to prior as well as future uses of such defined words and phrases."

The claims supplied by the inventors are:

"What is claimed is:

- "1. A head mounted display (HMD), comprising: a transceiver; a display; and a processor coupled to the transceiver and the display, the processor configured to: control the transceiver to receive, from at least one other HMD, data related to a field of view (FOV) of the at least one other HMD in a virtual reality (VR) environment, the data including at least one of orientation information or status information of the at least one other HMD; generate, using the data related to the FOV of the at least one other HMD, an FOV of the HMD in the VR environment for display on the display; and cause the display to display a user interface (UI) element comprising a map overlaid on the FOV of the HMD that includes an indication of the data related to the FOV of the at least one other HMD, the indication of the data related to the FOV including an indication on the map of an orientation of the FOV of the at least one other HMD relative to an orientation of the FOV of the HMD, regardless of whether the orientation of the FOV of the at least one other HMD overlaps with the orientation of the FOV of the HMD.
- "2. The HMD of claim 1, wherein the processor is further configured to allow the FOV of the HMD to be controlled by at least one other HMD.
- "3. The HMD of claim 1, further comprising: an inertial measurement unit (IMU) coupled to the processor, wherein the processor is further configured to determine, based on data from the IMU, an indication to switch the HMD from a fixed guided mode to a different mode from the fixed guided mode.
- "4. The HMD of claim 3, wherein: the different mode is a flexible guided mode; and the processor is further configured to receive an indication from the at least one other HMD to match the FOV of the HMD to the FOV of the at least one other HMD while remaining in the flexible guided mode.
- "5. The HMD of claim 3, wherein: the processor is configured to determine the indication to switch the HMD from the fixed guided mode to the different mode by detecting, based on the data from the IMU, a movement of the HMD that is greater than a predetermined threshold; and the processor is further configured to, when the movement of the HMD that is greater than the predetermined threshold is detected, receive the indication to switch the HMD from the fixed guided mode to the different mode from the fixed guided mode.
- "6. The HMD of claim 3, wherein the processor is further configured to: receive an indication to return to the fixed guided mode; detect, based on data from the IMU, a return of the HMD to an initial pose; and when the return of the HMD to the initial pose is detected, interpret the detection as receiving the indication to return to the fixed guided mode.
- "7. The HMD of claim 1, wherein the processor is further configured to receive an indication for the HMD to enter a master role, wherein the master role allows the HMD to control a fixed guided mode or a flexible guided mode of one or more HMDs in a follower role.
- "8. The HMD of claim 1, wherein the data related to the FOV of the at least one other HMD comprises at least one of orientation information, VR environment location information, or status information.
- "9. The HMD of claim 1, wherein the processor is further configured to: control the transceiver to receive, from the at least one other HMD, data related to actions of the at least one other HMD; and replicate, using the data related to the actions of the at least one other HMD, the actions within the FOV of the HMD in the VR environment.
- "10. The HMD of claim 1, further comprising: a memory coupled to the processor and configured to record actions of the HMD and the FOV of the HMD, wherein the processor is further configured to control the

transceiver to transmit the recorded actions and the recorded FOV to at least one of a server or the at least one other HMD.

- "11. A head mounted display (HMD), comprising: a transceiver; a display; and a processor coupled to the transceiver and the display, the processor configured to: control the transceiver to transmit, to at least one other HMD, data related to a field of view (FOV) of the HMD in a virtual reality (VR) environment, the FOV of the HMD displayed on the display, wherein the data related to the FOV of the HMD is used to generate an FOV of the at least one other HMD in the VR environment for display on a display of the at least one other HMD; receive, from the at least one other HMD, data related to the FOV of the at least one other HMD, the data including at least one of orientation information or status information of the at least one other HMD; and cause the display to display a user interface (UI) element comprising a map overlaid on the FOV of the HMD that includes an indication of the received data related to the FOV of the at least one other HMD, the indication of the data related to the FOV including an indication on the map of an orientation of the FOV of the at least one other HMD relative to an orientation of the FOV of the HMD, regardless of whether the orientation of the FOV of the at least one other HMD overlaps with the orientation of the FOV of the HMD.
- "12. The HMD of claim 11, wherein the processor is further configured to control the FOV of the at least one other HMD.
- "13. The HMD of claim 11, wherein the processor is further configured to control the transceiver to receive, from the at least one other HMD, an indication that the at least one other HMD has switched from a fixed guided mode to a different mode from the fixed guided mode.
- "14. The HMD of claim 13, wherein: the different mode is a flexible guided mode; and the processor is further configured to control the transceiver to transmit, to the at least one other HMD, an indication to match the FOV of the at least one other HMD to the FOV of the HMD while remaining in the flexible guided mode.
- "15. The HMD of claim 13, wherein the processor is further configured to control the transceiver to receive, from the at least one other HMD, an indication that the at least one other HMD has returned to the fixed guided mode.
- "16. The HMD of claim 11, wherein the processor is further configured to control the transceiver to transmit, to the at least one other HMD, an indication for the at least one other HMD to enter a master role, wherein the master role allows the at least one other HMD to control a fixed guided mode or a flexible guided mode of one or more HMDs in a follower role.
- "17. The HMD of claim 11, wherein the data related to the FOV of the HMD comprises at least one of orientation information, VR environment location information, or status information.
- "18. The HMD of claim 11, wherein the processor is further configured to: control the transceiver to transmit, to the at least one other HMD, data related to actions of the HMD and an indication to replicate, using the data related to the actions of the HMD, the actions within the FOV of the at least one other HMD in the VR environment.
- "19. The HMD of claim 11, further comprising: a memory coupled to the processor, wherein the processor is further configured to: control the transceiver to receive, from the at least one other HMD, recorded actions and a recorded FOV of the at least one other HMD, and store, in the memory, the recorded actions and the recorded FOV of the at least one other HMD.
- "20. A method, comprising: receiving, by an HMD from at least one other HMD, data related to a field of view (FOV) of the at least one other HMD in a virtual reality (VR) environment, the data including at least one of orientation information or status information of the at least one other HMD; generating, using the data related to the FOV of the at least one other HMD, an FOV of the HMD in the VR environment for display on a display; and displaying on the display a user interface (UI) element comprising a map overlaid on the FOV of the HMD that includes an indication of the data related to the FOV of the at least one other HMD, the indication of the data related to the FOV including an indication on the map of an orientation of the FOV of the at least one other HMD relative to an orientation of the FOV of the HMD, regardless of whether the orientation of the FOV of the at least one other HMD overlaps with the orientation of the FOV of the HMD.
- "21. The method of claim 20, further comprising allowing the FOV of the HMD to be controlled by at least one other HMD.
- "22. The method of claim 20, further comprising determining, based on data from an inertial measurement unit (IMU), an indication to switch the HMD from a fixed guided mode to a different mode from the fixed guided mode.

- "23. The method of claim 22, wherein: the different mode is a flexible guided mode; and the method further comprises receiving an indication to match the FOV of the HMD to the FOV of the at least one other HMD while remaining in the flexible guided mode.
- "24. The method of claim 22, further comprising: determining the indication to switch the HMD from the fixed guided mode to the different mode by detecting, based on the data from the IMU, a movement of the HMD that is greater than a predetermined threshold; and when the movement of the HMD that is greater than the predetermined threshold is detected, receiving the indication to switch the HMD from the fixed guided mode to the different mode from the fixed guided mode.
- "25. The method of claim 22, further comprising: receiving an indication to return to the fixed guided mode; detecting, based on data from the IMU, a return of the HMD to an initial pose; and when the return of the HMD to the initial pose is detected, interpreting the detection as receiving the indication to return to the fixed guided mode.
- "26. A method, comprising: transmitting, from an HMD to at least one other HMD, data related to a field of view (FOV) of the HMD in a virtual reality (VR) environment, wherein the data related to the FOV of the HMD is used to generate an FOV of the at least one other HMD in the VR environment; receiving, from the at least one other HMD, data related to the FOV of the at least one other HMD, the data including at least one of orientation information or status information of the at least one other HMD; and displaying on a display a user interface (UI) element comprising a map overlaid on the FOV of the HMD that includes an indication of the received data related to the FOV of the at least one other HMD, the indication of the data related to the FOV including an indication on the map of an orientation of the FOV of the at least one other HMD relative to an orientation of the FOV of the HMD, regardless of whether the orientation of the FOV of the at least one other HMD overlaps with the orientation of the FOV of the HMD.
- "27. The method of claim 26, further comprising controlling the FOV of the at least one other HMD.
- "28. The method of claim 26, further comprising receiving, from the at least one other HMD, an indication that the at least one other HMD has switched from a fixed guided mode to a different mode from the fixed guided mode.
- "29. The method of claim 28, wherein: the different mode is a flexible guided mode; and the method further comprises transmitting, to the at least one other HMD, an indication to match the FOV of the at least one other HMD to the FOV of the HMD while remaining in the flexible guided mode.
- "30. The method of claim 28, further comprising receiving, from the at least one other HMD, an indication that the at least one other HMD has returned to the fixed guided mode.
- "31. A non-transitory computer readable medium embodying a computer program, the computer program comprising computer readable program code that when executed causes at least one processing device to: control a transceiver to receive, at an HMD from at least one other HMD, data related to a field of view (FOV) of the at least one other HMD in a virtual reality (VR) environment, the data including at least one of orientation information or status information of the at least one other HMD; generate, using the data related to the FOV of the at least one other HMD, an FOV of the HMD in the VR environment; and cause a display to display a user interface (UI) element comprising a map overlaid on the FOV of the HMD that includes an indication of the data related to the FOV of the at least one other HMD, the indication of the data related to the FOV including an indication on the map of an orientation of the FOV of the at least one other HMD relative to an orientation of the FOV of the HMD, regardless of whether the orientation of the FOV of the at least one other HMD overlaps with the orientation of the FOV of the HMD.
- "32. The non-transitory computer readable medium of claim 31, wherein the computer readable program code further causes the at least one processing device to: allow the FOV of the HMD to be controlled by at least one other HMD.
- "33. The non-transitory computer readable medium of claim 31, wherein the computer readable program code further causes the at least one processing device to: determine, based on data from an inertial measurement unit (IMU), an indication to switch the HMD from a fixed guided mode to a different mode from the fixed guided mode.
- "34. The non-transitory computer readable medium of claim 33, wherein: the different mode is a flexible guided mode; and the computer readable program code further causes the at least one processing device to receive an indication to match the FOV of the HMD to the FOV of the at least one other HMD while remaining in the flexible guided mode.
- "35. The non-transitory computer readable medium of claim 33, wherein the computer readable program code further causes the at least one processing device to: determine the indication to switch the HMD from the fixed guided mode to the different mode by detecting, based on the data from the IMU, a movement of the Page 6 of 62 © 2022 Factiva, Inc. All rights reserved.

HMD that is greater than a predetermined threshold; and when the movement of the HMD that is greater than the predetermined threshold is detected, receive the indication to switch the HMD from the fixed guided mode to the different mode from the fixed guided mode.

- "36. The non-transitory computer readable medium of claim 33, wherein the computer readable program code further causes the at least one processing device to: receive an indication to return to the fixed guided mode; detect, based on data from the IMU, a return of the HMD to an initial pose; and when the return of the HMD to the initial pose is detected, interpret the detection as receiving the indication to return to the fixed guided mode.
- "37. A non-transitory computer readable medium embodying a computer program, the computer program comprising computer readable program code that when executed causes at least one processing device to: control a transceiver to transmit, from an HMD to at least one other HMD, data related to a field of view (FOV) of the HMD in a virtual reality (VR) environment, wherein the data related to the FOV of the HMD is used to generate an FOV of the at least one other HMD in the VR environment; receive, from the at least one other HMD, data related to the FOV of the at least one other HMD, the data including at least one of orientation information or status information of the at least one other HMD; and cause a display to display a user interface (UI) element comprising a map overlaid on the FOV of the HMD that includes an indication of the received data related to the FOV of the at least one other HMD, the indication of the data related to the FOV including an indication on the map of an orientation of the FOV of the at least one other HMD relative to an orientation of the FOV of the HMD, regardless of whether the orientation of the FOV of the at least one other HMD overlaps with the orientation of the FOV of the HMD.
- "38. The non-transitory computer readable medium of claim 37, wherein the computer readable program code further causes the at least one processing device to: control the FOV of the at least one other HMD.
- "39. The non-transitory computer readable medium of claim 37, wherein the computer readable program code further causes the at least one processing device to: control the transceiver to receive, from the at least one other HMD, an indication that the at least one other HMD has switched from a fixed guided mode to a different mode from the fixed guided mode.
- "40. The non-transitory computer readable medium of claim 39, wherein: the different mode is a flexible guided mode; and the computer readable program code further causes the at least one processing device to control the transceiver to transmit, to the at least one other HMD, an indication to match the FOV of the at least one other HMD to the FOV of the HMD while remaining in the flexible guided mode.
- "41. The non-transitory computer readable medium of claim 39, wherein the computer readable program code further causes the at least one processing device to: control the transceiver to receive, from the at least one other HMD, an indication that the at least one other HMD has returned to the fixed guided mode."

URL and more information on this patent, see: Rochford, Ciaran; Harscoet, Philippe; Li, Xiaoguang. Guided View Mode For Virtual Reality. U.S. Patent Number 10,976,982, filed February 2, 2018, and published online on April 26, 2021. Patent URL:

http://patft.uspto.gov/netacgi/nph-

 $\frac{Parser?Sect1=PTO1\&Sect2=HITOFF\&d=PALL\&p=1\&u=\%2Fnetahtml\%2FPTO\%2Fsrchnum.htm\&r=1\&f=G\&l=50\&s1=10,976,982.PN.\&OS=PN/10,976,982RS=PN/10,976,982$

Keywords for this news article include: Business, Software, Computers, Electronics Companies, Information Technology, Samsung Electronics Co. Ltd..

Our reports deliver fact-based news of research and discoveries from around the world. Copyright 2021, NewsRx LLC

Document INTEWK0020210427eh4r000ho



Samsung and LG Zeroing in on Gaming Monitor Market

431 words
27 April 2021
Business Korea Daily News
BKORDN
English
Copyright 2021 Business Korea Co., Ltd.

Samsung Electronics and LG Electronics are stepping up their efforts to secure supremacy in the gaming monitor market. The prolonged COVID-19 pandemic is fueling the growth of the gaming monitor market.

LG Electronics will release its new Ultra Gear Gaming Monitor (model name: 27GP950) in Korea on May 3. It features a high-definition multimedia interface (HDMI) 2.1 terminal that supports a 120Hz refresh rate at 4K. It allows users to enjoy high scan rate games with a 4K resolution on PCs as well as on the latest game consoles such as the Xbox Series X and the PlayStation 5.

This product has one-millisecond response rate on a 4K IPS panel. It also has a 160Hz high scan rate that shows up to 160 pictures per second by connecting to a display terminal.

The gaming monitor also has Nano IPS Display that applies a nanometer of fine particles to backlights and meets 98 percent of the Digital Cinema Initiatives' standard color area "DCI-P3."

It mixes well with Nvidia G-SYNC Compatible and AMD Radeon FreeSync Premium Pro products among others and minimizes screen buffering by matching the scan rate of a monitor screen with the graphic card signal of an external device.

Samsung Electronics is also aiming to expand its presence in the gaming monitor market by introducing its gaming brand Odyssey Series. Samsung Electronics recently introduced Odyssey G9 (Type 49) with Quantum Mini Light Emitting Diodes (LEDs) in 2021. Like TVs, the gaming monitor implements vivid images by applying quantum matrix technology and boasts top-notch gaming specifications such as a 240Hz scan rate and a 1ms response rate.

It also has a 5120 x 1440 (DQHD) resolution and a 1000R curvature. It also supports Nvidia's G-Sync Compatible and AMD's FreeSync Premium Pro, which reduce screen buffering when playing a high-definition game.

The gaming monitor market is steadily on the uptick. According to market research company TrandForce, global gaming monitor shipments are expected to increase 41 percent to 25.9 million units in 2021 from 18.4 million units in 2020.<|t-toolbar contenteditable="false" style="display: none;"><|t-div class="lt-toolbar_wrapper" style="left: 547px; position: absolute !important; top: 318px !important; bottom: auto !important; z-index: auto;"><|t-div class="lt-toolbar_premium-icon"></lt-div><|t-div class="lt-toolbar_status-icon lt-toolbar_status-icon-has-no-errors" title="LanguageTool - Spelling and Grammar Check"></lt-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-div><|t-d

http://www.businesskorea.co.kr/news/articleView.html?idxno=65733

Document BKORDN0020210427eh4r0005q

Virtual Reality Content Creation Market to Boom Post 2021 | Oculus, Google, Microsoft, Samsung

1,125 words 23 April 2021 iCrowdNewswire ICROWDN English

© Copyright iCrowdNewswire LLC 2021. All rights reserved

Latest released the research study on Global Virtual Reality Content Creation Market, offers a detailed overview of the factors influencing the global business scope. Virtual Reality Content Creation Market research report shows the latest market insights, current situation analysis with upcoming trends and breakdown of the products and services. The report provides key statistics on the market status, size, share, growth factors of the Virtual Reality Content Creation.

The study covers emerging player's data, including: competitive landscape, sales, revenue and global market share of top manufacturers are: Oculus VR (United States),Google (United States),HTC Vive (China),Unity (United States),Microsoft (United States),Samsung (South Korea),Magic Leap (United States),WorldViz (United States),Snap Inc (United States),Wevr (United States)

Free Sample Report + All Related Graphs & Charts @:

https://www.advancemarketanalytics.com/sample-report/57329-global-virtual-reality-content-creation-market

Definition:

The Virtual reality refers to demonstrating real experience of a particular subject by using the computer-generated technology of a 3D image or atmosphere that can be interacted with in a relatively real or physical way by a person using special electronic equipment, such as a helmet with a screen inside or gloves fitted with sensors, goggles, etc. VR content creation imitates the presence of real environments which gives thundering experiences to the consumer.

Analyst at AMA have conducted special survey and have connected with opinion leaders and Industry experts from various region to minutely understand impact on growth as well as local reforms to fight the situation. A special chapter in the study presents Impact Analysis of COVID-19 on Global Virtual Reality Content Creation Market along with tables and graphs related to various country and segments showcasing impact on growth trends.

Market Trend:

Popularity Increasing For Virtual Games, Virtual Classrooms And Virtual Reality Content Movie

Market Drivers:

Highly demanded as it facilitates three-dimensional, computer-generated environment which can be explored and interacted with by an individual

Growing Use In Educational Learning Which Creates Immersive Experiences That Can Help Educate And Even Entertain consumers

Opportunities:

Growing Interest Of Children And Youngster In Different VR Animations And Contents

Growing Population Which Is Addicted To Virtual World

The Global Virtual Reality Content Creation Market segments and Market Data Break Down are illuminated below:

by Type (360-Degree Videos, 3D Animations, 3D Graphics (Computer animation, 3D modeling, Visual effects, Product design, Graphic/motion design, Visualization for architecture, engineering, Stereoscopic, 3D effects)), Application (Entertainment industry, Educational Learning (Academic Research Through To Engineering, Design, Business, Arts), Develop New Models, Training Methods, Communication and Interaction), Platform (Non-immersive reality, Fully immersive reality, Augmented reality, Collaborative, Web-based), End-User (Real Estate, Travel & Hospitality, Healthcare, Retail Marketing, Gaming, Automotive), Component (Software, Service)

Enquire for customization in Report @:

https://www.advancemarketanalytics.com/enquiry-before-buy/57329-global-virtual-reality-content-creation-market

Region Included are: North America, Europe, Asia Pacific, Oceania, South America, Middle East & Africa

Country Level Break-Up: United States, Canada, Mexico, Brazil, Argentina, Colombia, Chile, South Africa, Nigeria, Tunisia, Morocco, Germany, United Kingdom (UK), the Netherlands, Spain, Italy, Belgium, Austria, Turkey, Russia, France, Poland, Israel, United Arab Emirates, Qatar, Saudi Arabia, China, Japan, Taiwan, South Korea, Singapore, India, Australia and New Zealand etc.

What benefits does AMA research study is going to provide?

- Latest industry influencing trends and development scenario
- Open up New Markets
- To Seize powerful market opportunities
- Key decision in planning and to further expand market share
- Identify Key Business Segments, Market proposition & Gap Analysis
- Assisting in allocating marketing investments

Strategic Points Covered in Table of Content of Global Virtual Reality Content Creation Market:?

Chapter 1: Introduction, market driving force product Objective of Study and Research Scope the Virtual Reality Content Creation market

Chapter 2: Exclusive Summary - the basic information of the Virtual Reality Content Creation Market.

Chapter 3: Displaying the Market Dynamics- Drivers, Trends and Challenges of the Virtual Reality Content Creation

Chapter 4: Presenting the Virtual Reality Content Creation Market Factor Analysis Porters Five Forces, Supply/Value Chain, PESTEL analysis, Market Entropy, Patent/Trademark Analysis.

Chapter 5: Displaying market size by Type, End User and Region 2015-2020

Chapter 6: Evaluating the leading manufacturers of the Virtual Reality Content Creation market which consists of its Competitive Landscape, Peer Group Analysis, BCG Matrix & Company Profile

Chapter 7: To evaluate the market by segments, by countries and by manufacturers with revenue share and sales by key countries (2021-2026).

Chapter 8 & 9: Displaying the Appendix, Methodology and Data Source

Finally, Virtual Reality Content Creation Market is a valuable source of guidance for individuals and companies in decision framework.

Get More Information:

https://www.advancemarketanalytics.com/request-discount/57329-global-virtual-reality-content-creation-market

Key questions answered

- Who are the Leading key players and what are their Key Business plans in the Global Virtual Reality Content Creation market?
- What are the key concerns of the five forces analysis of the Global Virtual Reality Content Creation market?
- What are different prospects and threats faced by the dealers in the Global Virtual Reality Content Creation market?
- What are the strengths and weaknesses of the key vendors?

Definitively, this report will give you an unmistakable perspective on every single reality of the market without a need to allude to some other research report or an information source. Our report will give all of you the realities about the past, present, and eventual fate of the concerned Market.

Page 10 of 62 © 2022 Factiva, Inc. All rights reserved.

Thanks for reading this article; you can also get individual chapter wise section or region wise report version like North America, Europe or Asia.

About Author:

Advance Market Analytics is Global leaders of Market Research Industry provides the quantified B2B research to Fortune 500 companies on high growth emerging opportunities which will impact more than 80% of worldwide companies' revenues.

Our Analyst is tracking high growth study with detailed statistical and in-depth analysis of market trends & dynamics that provide a complete overview of the industry. We follow an extensive research methodology coupled with critical insights related industry factors and market forces to generate the best value for our clients. We Provides reliable primary and secondary data sources, our analysts and consultants derive informative and usable data suited for our clients business needs. The research study enables clients to meet varied market objectives a from global footprint expansion to supply chain optimization and from competitor profiling to M&As.

Contact Us:

Craig Francis (PR & Marketing Manager)

AMA Research & Media LLP

Unit No. 429, Parsonage Road Edison, NJ

New Jersey USA - 08837

Phone: +1 (206) 317 1218

sales@advancemarketanalytics.com

Connect with us at

https://www.linkedin.com/company/advance-market-analytics

https://www.facebook.com/AMA-Research-Media-LLP-344722399585916

https://twitter.com/amareport

Document ICROWDN020210423eh4n00094



Samsung Electronics Co. Ltd. Patent Issued for Body Position Sensitive Virtual Reality (USPTO 10,976,808)

2,912 words 22 April 2021 Computer Weekly News COMWKN 3238 English

© Copyright 2021 Computer Weekly News via via VerticalNews.com

2021 APR 28 (VerticalNews) -- By a News Reporter-Staff News Editor at Computer Weekly News -- According to news reporting originating from Alexandria, Virginia, by VerticalNews journalists, a patent by the inventors Rochford, Ciaran (Bellevue, WA); Li, Xiaoguang (Santa Clara, CA), filed on November 17, 2015, was published online on April 26, 2021.

The assignee for this patent, patent number 10,976,808, is Samsung Electronics Co. Ltd. (Suwon-si, South Korea).

Reporters obtained the following quote from the background information supplied by the inventors: "Although HMD technology has long been in development and wearable technology products are increasingly visible, there is a lack of specialized UI framework for HMD for both virtual reality (VR) and augmented reality (AR) applications. Currently HMD technology focuses on situations for VR when the user is sitting in a chair upright. However, the user may sometimes transition to a non-upright position."

In addition to obtaining background information on this patent, VerticalNews editors also obtained the inventors' summary information for this patent: "Embodiments of the present disclosure provide a body position sensitive virtual reality for a HMD.

"In one embodiment, a method is provided for displaying a user interface (UI) for a head-mountable display (HMD). The method includes generating content for display by the HMD at a default position in a viewable range, the viewable range including a viewed region that is visible to a user while wearing the HMD. The method also includes, responsive to a change in orientation of the HDM, identifying a new default position for the content in the viewable range based on the change in the orientation. The method also includes displaying the content at the new default position in the viewable range when the new default position is within the viewed region.

"In another example embodiment, an apparatus is provided for displaying a user interface (UI). The apparatus includes a head-mountable display (HMD) and at least one processor configured. The processor is configured to generate content for display by the HMD at a default position in a viewable range, the viewable range including a viewed region that is visible to a user while wearing the HMD. The processor is also configured to, responsive to a change in orientation of the HDM, identify a new default position for the content in the viewable range based on the change in the orientation. The processor is also configured to display the content at the new default position in the viewable range when the new default position is within the viewed region.

"In yet another example embodiment, a non-transitory computer-readable medium comprising program code is provided for generating a display of a user interface (UI) for a head-mountable display (HMD). The program code, when executed by at least one processor, causes an electronic device to generate content for display by the HMD at a default position in a viewable range, the viewable range including a viewed region that is visible to a user while wearing the HMD. The program code, when executed by at least one processor, causes an electronic device to, responsive to a change in orientation of the HDM, identify a new default position for the content in the viewable range based on the change in the orientation). The program code, when executed by at least one processor, causes an electronic device to display the content at the new default position in the viewable range when the new default position is within the viewed region.

"Other technical features may be readily apparent to one skilled in the art from the following figures, descriptions, and claims.

"Before undertaking the DETAILED DESCRIPTION below, it may be advantageous to set forth definitions of certain words and phrases used throughout this patent document. The term 'couple' and its derivatives refer to any direct or indirect communication between two or more elements, whether or not those elements are in physical contact with one another. The terms 'transmit,' 'receive,' and 'communicate,' as well as derivatives

thereof, encompass both direct and indirect communication. The terms 'include' and 'comprise,' as well as derivatives thereof, mean inclusion without limitation. The term 'or' is inclusive, meaning and/or. The phrase 'associated with,' as well as derivatives thereof, means to include, be included within, interconnect with, contain, be contained within, connect to or with, couple to or with, be communicable with, cooperate with, interleave, juxtapose, be proximate to, be bound to or with, have, have a property of, have a relationship to or with, or the like. The term 'controller' means any device, system or part thereof that controls at least one operation. Such a controller may be implemented in hardware or a combination of hardware and software and/or firmware. The functionality associated with any particular controller may be centralized or distributed, whether locally or remotely. The phrase 'at least one of,' when used with a list of items, means that different combinations of one or more of the listed items may be used, and only one item in the list may be needed. For example, 'at least one of: A, B, and C' includes any of the following combinations: A, B, C, A and B, A and C, B and C, and A and B and C.

"Moreover, various functions described below can be implemented or supported by one or more computer programs, each of which is formed from computer readable program code and embodied in a computer-readable medium. The terms 'application' and 'program' refer to one or more computer programs, software components, sets of instructions, procedures, functions, objects, classes, instances, related data, or a portion thereof adapted for implementation in a suitable computer readable program code. The phrase 'computer readable program code' includes any type of computer code, including source code, object code, and executable code. The phrase 'computer-readable medium' includes any type of medium capable of being accessed by a computer, such as read only memory (ROM), random access memory (RAM), a hard disk drive, a compact disc (CD), a digital video disc (DVD), or any other type of memory. A 'non-transitory' computer readable medium excludes wired, wireless, optical, or other communication links that transport transitory electrical or other signals. A non-transitory computer-readable medium includes media where data can be permanently stored and media where data can be stored and later overwritten, such as a rewritable optical disc or an erasable memory device.

"Definitions for other certain words and phrases are provided throughout this patent document. Those of ordinary skill in the art should understand that in many if not most instances, such definitions apply to prior as well as future uses of such defined words and phrases."

The claims supplied by the inventors are:

"What is claimed is:

- "1. A method for displaying a user interface (UI) for a head-mountable display (HMD), the method comprising: displaying a first portion of a viewable range of a background image in a display region of the HMD at a first viewing angle, wherein at least a portion of the viewable range of the background image is outside the display region of the HMD, wherein the display region is a three-dimensional view frustum, and wherein the background image is at a first position defined by a first set of coordinates; generating content for display by the HMD at a first default position within the display region of the HMD and in front of the first portion of the viewable range of the background image, wherein the first default position is located within the display region at a second position defined by a second set of coordinates that is different than the first set of coordinates to cause the content to be perceived in front of the background image; and responsive to a change in orientation of the HMD from the first viewing angle to a second viewing angle, changing the background image while maintaining a position of the content by: displaying a second portion of the viewable range of the background image in the display region of the HMD, the second portion comprising at least some of the viewable range of the background image that was previously outside the display region of the HMD, identifying a second default position for the content for display by the HMD in front of the second portion of the viewable range of the background image based on the second viewing angle, wherein the second default position is located within the display region at a third set of coordinates that differs from the second set of coordinates based on yawing or pitching the content in an x-z plane, relocating the content from the first default position to the second default position, wherein the relocating is based on the yawing or pitching the content in the x-z plane, and displaying the content in the three-dimensional view frustum at the second default position as it appeared at the first default position.
- "2. The method of claim 1, wherein identifying the second default position for the content for display by the HMD in front of the second portion of the viewable range of the background image is based on the change in the orientation of the HMD over a period of time and the display region displayed by the HMD.
- "3. The method of claim 1, wherein identifying the second default position is initiated when the change in the orientation of the HMD positions at least a portion of the content displayed on the HMD outside of the display region of the HMD.
- "4. The method of claim 1, further comprising: identifying the change in the orientation of the HMD when receiving a user input indicating the change.

- "5. The method of claim 1, further comprising: capturing a body position or posture of a user through a camera coupled to the HMD; and identifying the change in the orientation of the HMD over time based on the body position or posture of the user.
- "6. An apparatus for displaying a user interface (UI), the apparatus comprising: a head-mountable display (HMD); and at least one processor configured to, in response to movement of the HMD, vary a background image while maintaining a position of a content by: displaying a first portion of a viewable range of the background image in a display region of the HMD at a first viewing angle, wherein at least a portion of the viewable range of the background image is outside the display region of the HMD, wherein the display region is a three-dimensional view frustum, and wherein the background image is at a first position defined by a first set of coordinates, generating the content for display by the HMD at a first default position within the display region of the HMD and in front of the first portion of the viewable range of the background image, wherein the first default position is located within the display region at a second position defined by a second set of coordinates that is different than the first set of coordinates to cause the content to be perceived in front of the background image, responsive to a change in orientation of the HMD from the first viewing angle to a second viewing angle, identifying a second default position for the content in the viewable range of the background image based on the second viewing angle, wherein the second default position is located within the display region at a third set of coordinates that differs from the second set of coordinates based on yawing or pitching the content in an x-z plane, relocating the content from first default position to the second default position, wherein the content is relocated by a yaw motion or a pitch motion in the x-z plane, and displaying the content in the three-dimensional view frustum at the second default position as it appeared at the first default position.
- "7. The apparatus of claim 6, wherein the processor is further configured to identify the second default position for the content for display by the HMD in front of and within the viewable range of the background image is based on the change in the orientation of the HMD over a period of time and the display region of the background image displayed by the HMD.
- "8. The apparatus of claim 6, wherein the at least one processor is further configured to: initiate and identify the second default position when the change in the orientation of the HMD positions at least a portion of the content is displayed on the HMD outside of the display region of the HMD.
- "9. The apparatus of claim 6, wherein the at least one processor is further configured to: identify the change in the orientation of the HMD when receiving a user input indicating the change.
- "10. The apparatus of claim 6, wherein the at least one processor is further configured to: capture a body position or posture of a user through a camera coupled to the HMD; and identify the change in the orientation of the HMD based on the body position or posture of the user.
- "11. The apparatus of claim 6, wherein the viewable range of the background image is a plane within the display region of the HMD that is wider than the display region.
- "12. The apparatus of claim 6, wherein: the HMD is a display for a mobile communication device, the display region displayed by the HMD is smaller than the display for the mobile communication device, and the at least one processor is configured to convert two-dimensional content displayable by the display for the mobile communication device into three-dimensional content for display on the HMD in the display region.
- "13. A non-transitory computer-readable medium comprising program code for generating a display of a user interface (UI) for a head-mountable display (HMD) that, when executed by at least one processor, causes an electronic device to: display a first portion of a viewable range of a background image in a display region of the HMD at a first viewing angle, wherein at least a portion of the viewable range of the background image is outside the display region of the HMD, wherein the display region is a three-dimensional view frustum, and wherein the background image is at a first position defined by a first set of coordinates; generate content for display by the HMD at a first default position within the display region of the HMD and in front of the first portion of the viewable range of the background image, wherein the first default position is located within the display region at a second position defined by a second set of coordinates that is different than the first set of coordinates to cause the content to be perceived in front of the background image; and responsive to a change in orientation of the HMD from the first viewing angle to a second viewing angle, changing the background image while maintaining a position of the content by: identifying a second default position for the content in the viewable range of the background image based on the second viewing angle, wherein the second default position is located within the display region at a third set of coordinates that differs from the second set of coordinates based on yawing or pitching the content in an x-z plane, relocating the content from the first default position to the second default position based on a yaw motion or a pitch motion in the x-z plane, and displaying the content in the three-dimensional view frustum at the second default position as it appeared at the first default position.

- "14. The non-transitory computer-readable medium of claim 13, wherein identifying the second default position for the content for display by the HMD in front of and within the viewable range of the background image is based on the change in an average orientation of the HMD over a period of time and the display region of the background image displayed by the HMD.
- "15. The non-transitory computer-readable medium of claim 13, further comprising program code that that, when executed by the at least one processor, causes the HMD to: initiate and identify the second default position when the change in the orientation of the HMD positions at least a portion of the content displayed on the HMD outside of the display region of the HMD.
- "16. The non-transitory computer-readable medium of claim 13, further comprising program code that that, when executed by the at least one processor, causes the HMD to: identify the change in the orientation of the HMD when receiving a user input indicating the change."

For more information, see this patent: Rochford, Ciaran; Li, Xiaoguang. Body Position Sensitive Virtual Reality. U.S. Patent Number 10,976,808, filed November 17, 2015, and published online on April 26, 2021. Patent URL:

http://patft.uspto.gov/netacgi/nph-

 $\frac{Parser?Sect1=PTO1\&Sect2=HITOFF\&d=PALL\&p=1\&u=\%2Fnetahtml\%2FPTO\%2Fsrchnum.htm\&r=1\&f=G\&l=50\&s1=10,976,808.PN.\&OS=PN/10,976,808RS=PN/10,976,808$

Keywords for this news article include: Business, Software, Computers, Electronics Companies, Samsung Electronics Co. Ltd..

Our reports deliver fact-based news of research and discoveries from around the world. Copyright 2021, NewsRx LLC

Document COMWKN0020210422eh4m0005p



Samsung: [Foldable Top Tips] □ From Navigation to Gaming, This is Your Guide to Making the Most of Galaxy Z Foldable Phones in Novel Ways

Distributed by Contify.com 1,125 words 16 April 2021 Contify Retail News ATRTAL English Copyright © 2021 Contify.com

April 16 -- Samsung issued the following news release:

There is a whole world of convenience and multi-tasking that you wouldn't be aware of unless you've used a foldable smartphone. With its category-defining Galaxy Z Fold series and Galaxy Z Flip, Samsung Electronics has gone beyond the limitations of traditional smartphone form factors to provide users with diverse new experiences.

Unlike in the past when one screen meant one application open, Galaxy Z foldable phone users can divide their screens according to what they need to get done, and even rest their phone easily to harness apps hands-free. With the latest lineup of foldable phones, these multi-tasking features have evolved to become more sophisticated and offer more unique user experiences.

In the second part of this two-part series, Samsung Newsroom is providing some useful tips for harnessing the unique form factor and user experience (UX) of the Galaxy Z foldable lineup for everyday scenarios in ways you might not have thought of before.

Multi-Active Window 1: Viewing Two Navigation Applications - Simultaneously

When choosing which route to take with a navigation app, unforeseen circumstances, such as traffic jams or construction, can make you regret the route you've taken. Galaxy Z foldable phone users have an easy fix to such situations: thanks to Multi-Active Window, you can easily open up two different navigation apps at the same time to compare expected arrival times and traffic situations so as to follow the navigation route that will get you to your destination as quickly as possible.

Notably, the Galaxy Z Fold2 features a 7.6-inch Dynamic AMOLED 2X display that allows you to check your route with a single glance. If you'd like to switch back to following just one navigation app, simply adjust the Multi-Active Window tray to view the navigation app you prefer with a single tap of the screen. With this easy-to-view and easily dividable screen, you can navigate rush hour with an extra helping hand.

Multi-Active Window 2: Mobile Banking Made Easy

As mobile banking has become more convenient, it has become more and more common for us to use our smartphones to make financial transactions as we go about our day, particularly when we need to send a friend some money or make a quick online purchase. However, bank account numbers are not easy to memorize, meaning that when it comes to making a transfer, we find ourselves switching back and forth between app windows – making what should be a seamless process somewhat inconvenient.

Galaxy Z foldable phone users can get their mobile bank transfers done in no time, as they can divide their smartphone's screen to view the messenger app with account information on the top half and manage their mobile banking app on the bottom half. You can enjoy convenient and accurate transactions on the very first try all without the hassle of memorizing account numbers as you can check the correct information as you go thanks to Multi-Active Window.

When you need to access information or details for a bank transfer regularly, you can use App Pair, a feature that lets you open up to three of your most-frequently used apps at the same time, to 'pair' your notepad with your mobile banking application – meaning that the two will open simultaneously and allow you to make your payments more conveniently.

Drag and Drop: For Editing Files, Even While on the Go

We've all had those moments after work when we're enjoying having logged off for the day – but then an urgent message comes in that the presentation we were working on requires editing. In order to allow users

to respond to such time-sensitive requests using just their Galaxy Z foldable smartphones, Samsung has developed intuitive document editing functions for easy file editing in any situation.

Drag and Drop is a feature that lets you copy & paste text, charts and images instantly when using compatible apps. For example, say you have divided your screen into three parts using Multi-Active Window to open up Excel, PowerPoint, and Word at the same time. You can easily edit all your files in one go with this feature as you can copy data from Excel and paste it right away into your PowerPoint presentation, or copy an image from PowerPoint and paste it directly into your Word document. From editing through to sending the edited file, everything can be taken care of directly from your smartphone.

Multi-Active Window 3: Making Travel Plans Easier and Quicker with Vertical Split Screen

Making concrete and organized travel plans is a crucial part of having a relaxing vacation, especially when you're planning for a spontaneous weekend away or a sudden trip that doesn't leave you with much time to plan. Getting everything done at once can be overwhelming, so by harnessing Multi-Active Window and Vertical Split Screen Mode of your Galaxy Z foldable phone, you can make your vacation plans and bookings with optimal efficiency. First, split your top screen vertically, and harness the bottom screen to research your vacation ideas while making note of itineraries in one half of your split top screen and searching for real-time pricings of accommodations on the other half.

Furthermore, Galaxy Z Fold users can simply swipe left on their Edge panel, tap the app they'd like to switch into their Multi-Active Window layout and drag it into the layout to instantly open the app. For your most commonly-used layouts, you can also save a specific mode into your Edge panel for easy and instant access whenever you need it.

Flex Mode: Harnessing Your Foldable Phone for Victory with a Second Screen

These days, many gamers are using game walkthroughs, which are guides that provide useful information pertaining to the game's characters, maps, items and more. In order to most effectively enjoy a walkthrough while playing a game, Galaxy Z Fold2 users can harness their smartphone as a handy secondary monitor by using Flex mode and the Cover display. Simply place your device in a convenient location and enjoy stress-free gaming without the hassle of having to set up a secondary monitor or arrange a smartphone within the best field of vision.

If you'd like to watch the game walkthrough more in detail, all you need to do is just unfold the Galaxy Z Fold. The Galaxy Z Fold series supports App Continuity, meaning that you can freely move between the Cover and Main displays.

Source: Samsung

Document ATRTAL0020210417eh4g000jp



Samsung Electronics Co. Ltd. Patent Issued for Method And Apparatus For Providing Information Regarding Virtual Reality Image (USPTO 10,970,546)

3,158 words 15 April 2021 Computer Weekly News COMWKN 5591 English

© Copyright 2021 Computer Weekly News via via VerticalNews.com

2021 APR 21 (VerticalNews) -- By a News Reporter-Staff News Editor at Computer Weekly News -- A patent by the inventors Yakishyn, Yevgen (Kiyv, UA); Shchur, Oleksandr (Kiyv, UA); Radomskyi, Oleksandr (Kharkov, UA), filed on December 21, 2017, was published online on April 19, 2021, according to news reporting originating from Alexandria, Virginia, by VerticalNews correspondents.

Patent number 10,970,546 is assigned to Samsung Electronics Co. Ltd. (Suwon-si, South Korea).

The following quote was obtained by the news editors from the background information supplied by the inventors: "Recently, apparatuses for providing images to users by using virtual reality (VR) devices have been developed. VR technology allows users to feel a sense of reality via manipulated sense stimuli and may be utilized in many industrial fields such as games, education, medicine, and journalism.

"With the development of VR-related technology, users may view a 360-degree image by using various devices. Users viewing a 360-degree image may feel more immersed compared to when they view a planar image."

In addition to the background information obtained for this patent, VerticalNews journalists also obtained the inventors' summary information for this patent: "To address the above-discussed deficiencies, it is a primary object to provide methods and apparatuses for providing information regarding a virtual reality image.

"Provided are non-transitory computer-readable recording media having recorded thereon a program for executing the methods on a computer.

"Additional aspects will be set forth in part in the description which follows and, in part, will be apparent from the description, or may be learned by practice of the presented embodiments.

"According to an aspect of an embodiment, a method of providing information regarding a virtual reality (VR) image includes: providing the VR image; determining, based on a gaze of a user viewing the VR image, an image that is reproduced in a partial area of the VR image as an image of interest; and providing information regarding the image of interest.

"The information regarding the image of interest may include coordinates of an area where the image of interest is reproduced and a reproduction section of the image of interest.

"The determining of the image that is reproduced in a partial area of the VR image as the image of interest may include: when the gaze of the user is fixed to a certain area of the VR image, determining the area of the VR image where the gaze of the user is fixed; and determining a VR image that is reproduced in the determined area as the image of interest.

"The determining of the image that is reproduced in a partial area of the VR image as the image of interest may include: when the gaze of the user moves according to movement of an object included in the VR image, obtaining a movement path of the gaze of the user; determining areas of the VR image corresponding to the movement path of the gaze of the user; and determining a VR image that is reproduced in the determined areas as the image of interest.

"The providing of the information regarding the image of interest may include: obtaining frames included in the image of interest; determining, based on an amount of change in the frames, at least one key frame from among the frames; and providing information regarding the at least one key frame.

"The providing of the information regarding the image of interest may include providing the image of interest reproduced in a partial area of the VR image at a picture quality higher than that of an image reproduced in remaining areas.

"The method may further include: receiving a comment of the user on the image of interest; and linking the comment of the user with the information regarding the image of interest and storing the comment of the user.

"The method may further include: obtaining reproduction data of the image of interest; and transmitting the obtained reproduction data to an external device.

"The method may further include: receiving, based on a result obtained by analyzing gazes of other users viewing the VR image, information regarding an image of interest of the other users; and providing the received information regarding the image of interest of the other users.

"The method may further include: receiving an input of the user for selecting the provided information regarding the at least one key frame; and reproducing the VR image starting from a reproduction location of the selected information regarding the at least one key frame.

"According to an aspect of another embodiment, a device for providing information regarding a virtual reality (VR) image includes: a sensor configured to sense a gaze of a user viewing the VR image; and a controller configured to provide the VR image, determine, based on the sensed gaze of the user, an image that is reproduced in a partial area of the VR image as an image of interest, and provide information regarding the image of interest.

"The controller may be further configured to determine, when the gaze of the user is fixed to a certain area of the VR image, the area of the VR image where the gaze of the user is fixed, and determine a VR image that is reproduced in the determined area as the image of interest.

"The controller may be further configured to obtain, when the gaze of the user moves according to movement of an object included in the VR image, a movement path of the gaze of the user, determine areas of the VR image corresponding to the movement path of the gaze of the user, and determine a VR image that is reproduced in the determined areas as the image of interest.

"The controller may be further configured to obtain frames included in the image of interest, determine, based on an amount of change in the frames, at least one key frame from among the frames, and provide information regarding the at least one key frame.

"The controller may be further configured to provide the image of interest reproduced in a partial area of the VR image at a picture quality higher than that of an image reproduced in remaining areas.

"The device may further include a communicator configured to receive a comment of the user on the image of interest, wherein the controller may be further configured to link the comment of the user with the information regarding the image of interest and store the comment of the user.

"The device may further include a communicator, wherein the controller may be further configured to obtain reproduction data of the image of interest, and the communicator may be configured to transmit the obtained reproduction data to an external device.

"The device may further include a communicator configured to receive, based on a result obtained by analyzing gazes of other users viewing the VR image, information regarding an image of interest of the other users, wherein the controller may be further configured to provide the received information regarding the image of interest of the other users.

"The device may further include a communicator configured to receive an input of the user for selecting the provided information regarding the at least one key frame, wherein the controller may be further configured to reproduce the VR image starting from a reproduction location of the selected key frame information.

"According to an aspect of another embodiment, a non-transitory computer-readable recording medium has recorded thereon a program for executing the above method on a computer.

"According to an aspect of another embodiment, a method and device includes: obtaining location information of a user; sensing a gaze of the user; determining a display area corresponding to the sensed gaze of the user as an area of interest; and providing view information displayed in the area of interest by matching the location information with the area of interest.

"Before undertaking the DETAILED DESCRIPTION below, it may be advantageous to set forth definitions of certain words and phrases used throughout this patent document: the terms 'include' and 'comprise,' as well as derivatives thereof, mean inclusion without limitation; the term 'or,' is inclusive, meaning and/or; the phrases 'associated with' and 'associated therewith,' as well as derivatives thereof, may mean to include, be included within, interconnect with, contain, be contained within, connect to or with, couple to or with, be communicable with, cooperate with, interleave, juxtapose, be proximate to, be bound to or with, have, have a property of, or the like; and the term 'controller' means any device, system or part thereof that controls at least

one operation, such a device may be implemented in hardware, firmware or software, or some combination of at least two of the same. It should be noted that the functionality associated with any particular controller may be centralized or distributed, whether locally or remotely.

"Moreover, various functions described below can be implemented or supported by one or more computer programs, each of which is formed from computer readable program code and embodied in a computer readable medium. The terms 'application' and 'program' refer to one or more computer programs, software components, sets of instructions, procedures, functions, objects, classes, instances, related data, or a portion thereof adapted for implementation in a suitable computer readable program code. The phrase 'computer readable program code' includes any type of computer code, including source code, object code, and executable code. The phrase 'computer readable medium' includes any type of medium capable of being accessed by a computer, such as read only memory (ROM), random access memory (RAM), a hard disk drive, a compact disc (CD), a digital video disc (DVD), or any other type of memory. A 'non-transitory' computer readable medium excludes wired, wireless, optical, or other communication links that transport transitory electrical or other signals. A non-transitory computer readable medium includes media where data can be permanently stored and media where data can be stored and later overwritten, such as a rewritable optical disc or an erasable memory device.

"Definitions for certain words and phrases are provided throughout this patent document, those of ordinary skill in the art should understand that in many, if not most instances, such definitions apply to prior, as well as future uses of such defined words and phrases."

The claims supplied by the inventors are:

"What is claimed is:

- "1. A method of providing information regarding a virtual reality (VR) image, the method comprising: providing the VR image; obtaining a summation value of polar coordinates of the VR image corresponding to a gaze of a user viewing the VR image; calculating a change amount over time of the summation value of the polar coordinates; determining an image corresponding to an area of the VR image in which the gaze of the user is located during a time when the change amount is less than or equal to a first threshold value as a static image of interest; determining at least one image corresponding to at least one area of the VR image in which the gaze of the user is located during a time when the change amount is between the first threshold value and a second threshold value as a dynamic image of interest; and providing information regarding at least one at least one of the static image of interest and the dynamic image of interest.
- "2. The method of claim 1, wherein the information regarding at least one of the static image of interest and the dynamic image of interest comprises coordinates of an area where the at least one static image of interest and the dynamic image of interest is reproduced and a reproduction section of the at least one static image of interest and the dynamic image of interest.
- "3. The method of claim 1, wherein the providing the information regarding at least one of the static image of interest and the dynamic image of interest comprises: obtaining frames comprised in at least one of the static image of interest and the dynamic image of interest; determining, based on an amount of change in the frames, at least one key frame from among the frames; and providing information regarding the at least one key frame.
- "4. The method of claim 3, further comprising: receiving an input of the user for selecting the provided information regarding the at least one key frame; and reproducing the VR image starting from a reproduction location of the selected information regarding the at least one key frame.
- "5. The method of claim 1, wherein the providing the information regarding at least one of the static image of interest and the dynamic image of interest comprises: providing at least one of the static image of interest and the dynamic image of interest reproduced in a partial area of the VR image at a picture quality higher than that of an image reproduced in remaining areas.
- "6. The method of claim 1, further comprising: receiving a comment of the user on at least one of the static image of interest and the dynamic image of interest; and linking the comment of the user with the information regarding at least one of the static image of interest and the dynamic image of interest and storing the comment of the user.
- "7. The method of claim 1, further comprising: obtaining reproduction data of at least one of the static image of interest and the dynamic image of interest; and transmitting the obtained reproduction data to an external device.
- "8. The method of claim 1, further comprising: receiving, based on a result obtained by analyzing gazes of other users viewing the VR image, information regarding an image of interest of the other users; and providing the received information regarding the image of interest of the other users.

- "9. A device for providing information regarding a virtual reality (VR) image, the device comprising: a sensor configured to sense a gaze of a user viewing the VR image; and a controller coupled to the sensor, the controller configured to: provide the VR image, obtain a summation value of polar coordinates of the VR image corresponding to the sensed gaze of the user, calculate a change amount over time of the summation value of the polar coordinates, determine an image corresponding to an area of the VR image in which the gaze of the user is located during a time when the change amount is less than or equal to a first threshold value as a static image of interest, determine at least one image corresponding to at least one area of the VR image in which the gaze of the user is located during a time when the change amount is between the first threshold value and a second threshold value as a dynamic image of interest, and provide information regarding at least one of the static image of interest and the dynamic image of interest.
- "10. The device of claim 9, wherein the controller is further configured to: obtain frames comprised in the at least one of the static image of interest and the dynamic image of interest; determine, based on an amount of change in the frames, at least one key frame from among the frames; and provide information regarding the at least one key frame.
- "11. The device of claim 10, further comprising a communicator, wherein the communicator is configured to: receive an input of the user for selecting the provided information regarding the at least one key frame, wherein the controller is further configured to reproduce the VR image starting from a reproduction location of the selected information regarding the at least one key frame.
- "12. The device of claim 9, wherein the controller is further configured to: provide the at least one of the static image of interest and the dynamic image of interest reproduced in a partial area of the VR image at a picture quality higher than that of an image reproduced in remaining areas.
- "13. The device of claim 9, further comprising a communicator, wherein the communicator is configured to: receive a comment of the user on the at least one of the static image of interest and the dynamic image of interest, wherein the controller is further configured to link the comment of the user with the information regarding the at least one of the static image of interest and the dynamic image of interest and store the comment of the user.
- "14. The device of claim 9, further comprising a communicator, and wherein the controller is further configured to obtain reproduction data of the at least one of the static image of interest and the dynamic image of interest, and the communicator is configured to transmit the obtained reproduction data to an external device.
- "15. The device of claim 9, further comprising a communicator, wherein the communicator is configured to: receive, based on a result obtained by analyzing gazes of other users viewing the VR image, information regarding an image of interest of the other users, wherein the controller is further configured to provide the received information regarding the image of interest of the other users.
- "16. A non-transitory computer-readable recording medium embodying a computer program, the computer program comprising computer readable program code that, when executed by at least one processor, causes the at least one processor to: provide a VR image; obtain a summation value of polar coordinates of the VR image corresponding to a gaze of a user viewing the VR image; calculate a change amount over time of the summation value representing the polar coordinates, determine an image corresponding to an area of the VR image in which the gaze of the user is located during a time when the change amount is less than or equal to a first threshold value as a static image of interest; determine at least one image corresponding to at least one area of the VR image in which the gaze of the user is located during a time when the change amount is between the first threshold value and a second threshold value as a dynamic image of interest; and provide information regarding the image of interest."

URL and more information on this patent, see: Yakishyn, Yevgen; Shchur, Oleksandr; Radomskyi, Oleksandr. Method And Apparatus For Providing Information Regarding Virtual Reality Image. U.S. Patent Number 10,970,546, filed December 21, 2017, and published online on April 19, 2021. Patent URL: http://patft.uspto.gov/netacgi/nph-

Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=10.970,546.PN.&OS=PN/10.970,546RS=PN/10.970,546

Keywords for this news article include: Business, Computers, Electronics Companies, Samsung Electronics Co. Ltd.

Our reports deliver fact-based news of research and discoveries from around the world. Copyright 2021, NewsRx LLC

Document COMWKN0020210415eh4f0008d



Samsung Brings the Stunning Next-Generation Neo QLED TV to India; Enjoy Luxurious Cinematic Experience & Immersive Gaming at Home

1,517 words
15 April 2021
ENP Newswire
ENPNEW
English
© 2021, Electronic News Publishing, All Rights Reserved.

Release date - 14042021

Samsung, India's No. 1 TV brand, today launched its ultra-premium Neo QLED TV range, a new benchmark in TV technology and design that will transform your living spaces. The new range sports a nearly bezel-less Infinity One Design and exceptionally true-to-life picture quality for a cinematic viewing experience.

Neo QLED TV will take QLED TVs to the next level with Quantum Mini LED, precisely controlled by Quantum Matrix Technology and Neo Quantum Processor, a powerful picture processor optimized for Neo QLED TV. These Mini LEDs are 40 times smaller than regular LEDs, which allows the device to display fine light and contrast levels. It increases the luminance scale that makes dark areas darker and bright areas brighter, resulting in a more precise and immersive HDR experience.

Samsung is introducing a whole new display technology, Neo QLED TV, to its flagship 8K and 4K TV models. The line-up will be available in 5 sizes 85-inch (2m 16cm), 75-inch (1m 89cm), 65-inch (1m 63cm), 55-inch (1m 38cm) and 50-inch (1m 25cm). Consumers pre-booking select Neo QLED TVs can avail offers such as complimentary Galaxy Tab S7+, Galaxy Tab S6 Lite LTE, cashback of up to INR 20,000 and EMIs starting as low as INR 1,990 from April 15-30, 2021.

Neo QLED TVs come with Samsung's proprietary, powerful Neo Quantum Processor with enhanced upscaling capabilities. By using up to 16 different neural network models, each trained in AI upscaling and deep learning technology, the Neo Quantum Processor can optimize picture quality to 4K and 8K picture output regardless of the input quality.

The 2021 Neo QLED TV line-up has been designed with gaming in mind with its Motion Xcelerator Turbo+ feature for an immersive ultra-wide gaming experience. This gives gamers the option to play PC and console games with a Super Ultra-Wide Game View and Game Bar. The 2021 Neo QLED TV models provide a seamless gaming experience with Auto Low Latency Mode ensuring a reliable experience with no tearing and stuttering. They also feature the new and intuitive Game Bar that allows gamers to easily adjust the screen's aspect ratio, check input lag, connect wireless headsets, and more.

'Staying indoors most of the time has altered television consumption patterns. Consumers today prefer buying large screen premium TVs that not only lend a distinguished style statement to their living spaces but also offer a great viewing experience. With Neo QLED TVs, the next generation of QLED TVs, we are delivering breakthrough enhancements that allow consumers to unlock the full power of immersive TV viewing. The role of the TV in our lives has grown-and in 2021, Samsung continues to redefine the role of TV around the needs and passions of consumers,' said Raju Pullan, Senior Vice President, Consumer Electronics Business, Samsung India.

The new line-up also packs in several premium, room-filling audio features - Object Tracking Sound Pro's dynamic sound corresponds to the movement of objects on screen and SpaceFit Sound analyzes the installed TV's physical environment and provides immersive sound tailored specifically to your space.

The new line-up will come with the Samsung TV Plus service that was launched in India recently, offering consumers instant access to exciting content across genres such as news, lifestyle, technology, gaming and science, sports and outdoors, music, movies and bingeable shows, without any subscription and no additional device such as a set top box.

Price, Offers & Where to Buy

Samsung's new range of Neo QLED 8K TVs will be available in two models - QN800A 75-inch and 65-inch and QN900A 85-inch.

The 2021 Neo QLED 4K TV line-up would also be available in two models - QN85A in 75-inch, 65-inch and 55-inch and QN90A in 85-inch, 65-inch, 55-inch and 50-inch.

Neo QLED TV range will be priced from INR 99,990 onwards and will be available at all Samsung retail stores, leading consumer electronics stores, and across online platforms, including Samsung's official online store Samsung Shop.

Consumers pre-booking select Neo QLED TVs can avail offers such as complimentary Galaxy Tab S7+, Galaxy Tab S6 Lite LTE, cashback of up to INR 20,000 and EMIs starting as low as INR 1,990 from April 15-18, 2021 exclusively on Samsung's official online store Samsung Shop.

From April 19-30, 2021, the same pre-book offers will also be available on Flipkart, Amazon and at all leading consumer electronics stores.

Warranty

Consumers will be offered a 2-year warranty on all panels and a 10-year no screen burn-in warranty on Neo OLED 4K TVs.

About Samsung Neo QLED

With the 2021 line-up, Samsung introduces its Neo QLED TV - a whole new world of QLED TVs with a perfect blend of design and premium features. The Neo QLED delivers cutting-edge Quantum Matrix Technology with a powerful Neo Quantum Processor. Samsung's 2021 Neo QLED 8K and 4K models offer smart features that expand the role of the TV and help consumers meet their evolving needs.

The Neo QLED offers a whole new level of picture quality

Quantum Matrix Technology

The Quantum Matrix Technology in the new line-up delivers a massive reduction in picture blooming using precise lighting, with detail-revealing deep black tones powered by tiny Quantum Mini LEDs.

Neo Quantum Processor 4K and 8K

Neo Quantum Processors feature advanced AI Upscaling technology that utilizes data generated from up to 16 neural networks to produce a more detailed resolution, regardless of the image quality of the source. This results in enhanced visual details that make one feel like they are right there cheering from the stands.

100% Colour Volume with Quantum Dot

The new range of Neo QLED TVs features nano-sized Quantum Dots that enable one to see 100% colour volume in everything they watch, even in the brightest scenes.

Quantum HDR

Quantum HDR technology takes you beyond the conventional TV experience with an expanded range of colour, brightness and contrast so that you can experience the full vibrancy of every image.

A revolution in design that removes bulk and distractions

Samsung's 2021 Neo QLED 8K features a new Infinity One Design-a nearly bezel-less screen providing an even more immersive viewing experience in a sleek design and form factor. And Neo QLED 8K's attachable Slim One Connect box-an all-new cable management system-allows for an easier install and cleaner aesthetic. With black edges all but erased, the Infinity screen offers new levels of immersive viewing and completely modernizes your space.

A complete sound experience like never before

The 2021 Neo QLED comes with exclusive audio features like Object Tracking Sound Pro (OTS Pro) technology that lets you hear the action exactly where it's happening - if the action moves, the sound moves with it whichever way it goes.

The Samsung Neo QLED TVs take sound one step further with Q-Symphony. Audio from Samsung Neo QLED TV comes together in harmony as Q-Symphony syncs them with your soundbar for a perfectly orchestrated surround sound experience.

The SpaceFit Sound feature allows you to enjoy perfect sound regardless of where and how you place your TV. SpaceFit sound technology analyzes the room environment and then auto-calibrates TV sound to its optimal settings.

When noisy distractions make it hard to hear what's being said on the TV, the Active Voice Amplifier feature comes into play on the Neo QLED TV. It uses ambient noise analysis and voice clarity optimization to enhance on-screen voices, producing clear and easily audible dialogue.

A gamer's dream

The Samsung Neo QLED range of televisions feature Samsung's Neo quantum processor 8K that supports gaming-focused features like higher frame rate, VRR (Variable Refresh Rate), ALLM (Auto Low Latency Mode) and eARC (Enhanced Audio Return Channel), ultra-precision light driving to name a few, all meeting HDMI 2.1 specifications. Motion Xcelerator Turbo+ allows you to never miss a beat with minimized blur and enhanced motion clarity, and to catch all the fast-moving action whether you're watching sports or taking advantage of next-gen gaming capabilities.

With exclusive new features, Samsung is delivering the ultimate TV gaming experience. Super Ultra-wide Game View gives gamers the option to play not only with the wide 21:9 aspect ratio but even with the ultra-wide 32:9 ratio. The wider field of view ensures gamers don't miss a moment of the action. And Game Bar lets players quickly monitor and adjust critical aspects of play-whether that is switching aspect ratios, checking input lag, or connecting a headset. Finally, FreeSync Premium Pro minimizes stuttering, so players enjoy smooth picture quality throughout gameplay.

Contact:

E: corpcommindia@samsung.com.

[Editorial queries for this story should be sent to newswire@enpublishing.co.uk]

Document ENPNEW0020210415eh4f0003j

Technology

Samsung to launch its 'most powerful Galaxy' product on April 28 at Unpacked 2021 virtual event, Galaxy Book laptops expected

Bulbul Dhawan 450 words 14 April 2021 Financial Express Online FIEXON English Copyright 2021. Indian Express Group

Samsung Galaxy Unpacked 2021: Smartphone giant Samsung is set to hold the Galaxy Unpacked 2021 event on April 28. The announcement was made by the company on Wednesday. The event will be held virtually and is set to be live streamed online, and it marks the third Galaxy Unpacked event to be conducted this year. Rumours are rife that the event would mark the announcement of new Galaxy Book laptops and some next-gen Chromebooks, unlike the previous two events this year where new smartphones were announced. However, the exact details about the event have not yet been officially shared by the Galaxy maker.

Samsung Galaxy Unpacked 2021 event: Timings, live-streaming

From what we know so far, the event is scheduled to begin at 7:30 pm IST on April 28, and it would be livestreamed. Viewers would be able to catch it live on the YouTube channel of Samsung, as well as the Samsung Newsroom site.

A teaser video has been released by the smartphone giant, which hinted towards the possible announcement of the next-gen computing devices from the company. The "most powerful Galaxy" is apparently about to be unveiled at the event, as per the video trailer.

Launch expectations at Samsung Galaxy Unpacked event

While no particular details about this "most powerful Galaxy" have been shared by Samsung, probably using the mystery to keep users on their toes, it is believed that the company's laptop line-up is going to be updated. The anticipation stems partly from the fact that with the pandemic, user demand has shifted somewhat from smartphones to tablets and computers.

If rumours are to be believed, Samsung Galaxy Pro and Galaxy Book Pro 360 could be the major models announced by the company during the event.

It has been claimed that the laptops would come in 13-inch and 15-inch versions and would be fitted with 11th-gen Intel Core processors. AMOLED displays, LTE Wireless connectivity, and Thunderbolt 4 ports are also some of the anticipated features, along with an S Pen stylus support and a 360-degree hinge design in Galaxy Book Pro 360.

Samsung could also debut its Chromebooks, also against the backdrop that competitors in the laptop segment are upgrading their Chromebook portfolios as well due to added demand for affordable ChromeOS laptops during the pandemic.

Apple's announcement has come right on the heels -- as in just a day after -- of Apple announcing its 'Spring Loaded' special virtual event on April 20, where it could likely unveil new models for its iPad lineup.

Document FIEXON0020210415eh4e0000y



CE Noticias Financieras English

Samsung summoned a surprise virtual event to present its "Most Powerful Galaxy"

639 words
14 April 2021
CE NoticiasFinancieras
NFINCE
English
Copyright © Content Engine LLC

Samsung surprisingly convened a Galaxy Unpacked virtual presentation event on Thursday for April 28, in which the South Korean company advanced that it will be focused on ads about its Galaxy family of mobile phones.

The tech manufacturer advanced that it will present its "Most Powerful Galaxy". At the moment he did not confirm which product he refers to from his Galaxy family, consisting not only of phones, but also tablets, laptops and Internet of Things (IoT) devices, among others.

The new Galaxy Unpacked presentation event on April 28, which Samsung communicated via a video on the official Twitter profile.

? In the clip you can see the journey of a box with mysterious content from a distribution center to a client's house, while on the way paranormal situations occur.

According to invitations sent to international media and agencies, the event will take place at 11 hours in Argentina.

The latest Galaxy announced in Argentinaln early 2021, the South Korean brand unveiled its flagship galaxy line: S21 Ultra 5G. This premium cell phone, which arrived in the country on February 12, is characterized by incorporating the "most advanced and brightest and smartest" professional camera system.

Rightly, its quad rear camera - main, wide-angle and two telephoto lenses - also has a new professional 108MP sensor, from which you can take 12-bit HDR photos with colors 64 times richer and a dynamic range that is three times wider.

Also, for the first time on a Galaxy phone, you can shoot in 4K quality from any lens, including the four front and rear, to get a different perspective with the same quality.

Another novelty of this device is that the camera zoom does not lose quality, since the Galaxy S21 Ultra 5G has a Space Zoom of x100, which works with Samsung's first dual-lens system.

At another online event Samsung announced in mid-March the launch of its new Galaxy A52 and Galaxy A72smartphones, with which the Korean brand intends to continue gaining weight in the competing mid-range, which has increasing market share.

Both models feature a 6.5-inch Super AMOLED Infinity-O panel, but will vary the refresh rate of the model's 90 Hz below 120 Hz of the 5G version, which will mount a Qualcomm Snapdragon 750G processor.

These two smartphones feature a quad camera configuration, with a 64-megapixel (MP) main lens with optical stabilization, an ultra wide-angle 12MP, a 5MP depth sensor and a 5MP macro. The selfie camera, on the other hand, has in both cases 32 MP resolution.

Samsung's new mobiles record 4K video while converting any frame per second to high-resolution 8MP images.

Software work is also perceived in scene optimization using Artificial Intelligence (AI), offering optimal configurations for thirty categories of images and backgrounds – such as food, landscapes or pets.

Meanwhile, the Galaxy A72 offers a small jump in size, reaching 6.7 inches (with a refresh rate of 90 Hz) and allowing to incorporate a battery of 5,000 mAh,but does not incorporate other remarkable novelties within this product range and it costs to differentiate the different models with the naked eye.

With a 25W fast charging it allows you to charge 80 percent in one hour, as explained from Samsung.

There is also some small difference in terms of camera. In this case, the A72 maintains a 64 MP main lens and 12 wide angle lens, with a depth sensor that takes a small leap in quality up to 8 MP and a macro at 5 MP. The front camera still offers a resolution of 32 MP.

Both the Galaxy A72 and A52 will be on sale from April 16 for the Argentine market.

SI

Look too

Document NFINCE0020210414eh4e0064x



CE Noticias Financieras English

Samsung convenes a virtual event on April 28 to present its "Most Powerful Galaxy"

243 words
14 April 2021
CE NoticiasFinancieras
NFINCE
English
Copyright © Content Engine LLC

Samsung has convened a galaxy unpacked virtual presentation event for April 28, in which the South Korean company has advanced that will announce the news of its Galaxy family.

The tech manufacturer has advanced that will present its "Most Powerful Galaxy". At the moment he has not revealed which product he refers to from his Galaxy family, consisting of mobile phones, tablets, computers and Internet of Things (IoT) devices, among others.

The new Galaxy Unpacked presentation event on April 28, which Samsung has convened through its official Twitter profile, according to invitations sent to media such as Europa Press will take place at 4 p.m. (in spanish peninsular time).

At its latest Galaxy Unpacked event on March 17, Samsung focused on its new Galaxy A72 and A52 mid-range mobile phones - this second, plus with 5G version - with features like quad camera with 64MP main sensor and screen with 90 Hz refresh rate.

TECHNOLOGY Newsletter with the most important analysis and news, every Wednesday. Enter your email Send Thank you for subscribing! An error has occurred, please try again later. We have something to offer youWith our digital subscription you will enjoy more than 300 exclusive items per month and ship our sites without limits. We have premium newsletters, an exclusive community for you, discounts with Club La Voz and more.

View Subscription Promotions Advertising

Document NFINCE0020210414eh4e004ix



PC/ Laptops

Samsung Hosting Galaxy Unpacked 2021 Virtual Event on April 28, Galaxy Book Laptops Expected

Jagmeet Singh 605 words 14 April 2021 11:15 NDTV NDTVIN English

Copyright. 2021. NDTV Convergence Ltd., New Delhi, India.

Samsung on Wednesday announced that it is hosting its next Galaxy Unpacked 2021 event on April 28. The virtual event, which will be the company's third Galaxy Unpacked of this year, will be livestreamed online and is expected to be the place where we could see new Galaxy Book laptops as well as some next-generation Chromebooks. This is unlike the two earlier Galaxy Unpacked versions where Samsung brought its new smartphones. Exact details about what Samsung is launching on April 28 are yet to be officially revealed.

Samsung Galaxy Unpacked 2021 timings, livestream details

The next Samsung Galaxy Unpacked 2021 will begin at 10am ET (7:30pm IST) on April 28. The event will be livestreamed through the Samsung Newsroom site and Samsung YouTube channel.

<u>Samsung</u> has released a <u>teaser video</u> that gives us a hint at the launch of the company's next-generation computing devices. The video claims that "the most powerful Galaxy" will be unveiling at the virtual launch event. You can watch the teaser video embedded below. Click here to view video

Samsung Galaxy Unpacked 2021 launch expectations

Although Samsung hasn't provided any particular details about what it is bringing at the Galaxy Unpacked 2021 event later this month, the company is believed to unveil its new laptops. The coronavirus pandemic has already boosted the demand for computing devices and shifted interest of companies from smartphones to laptops and tablets.

The rumour mill has suggested that the <u>Samsung Galaxy Pro</u> and <u>Galaxy Book Pro 360</u> could be the two key models launching at the Galaxy Unpacked 2021 event. Tipster Evan Blass <u>just earlier this week leaked</u> the purported renders of both new Galaxy Book models.

Blass claimed that the Galaxy Book Pro and Galaxy Book Pro 360 both would come in 13- and 15-inch sizes and have 11th-generation Intel Core processors. The laptops are also expected to have AMOLED displays, Thunderbolt 4 ports, and LTE wireless connectivity. The Galaxy Book Pro 360 in the series is also expected to have S Pen stylus support and a 360-degree hinge design.

"Pro is being positioned as the successor to the Galaxy Book Ion lineup, Pro 360 is more akin to the Galaxy Book Flex series," Blass said.

In addition to the Galaxy Book Pro models, Samsung is speculated to have the Galaxy Book Go in the works. The affordable laptop purportedly appeared on the US FCC website with two different model numbers.

Samsung may also have its new Chromebooks ready that could debut at the Galaxy Unpacked 2021 event. Companies including <u>HP</u> are also <u>upgrading their Chromebook portfolios</u> as the demand for affordable Chrome OS-based machines has <u>reached new levels</u> — owing mainly to the <u>COVID-19</u> outbreak.

Interestingly, Samsung isn't the only tech company that is hosting its major launch event this month. Apple is also holding a virtual event next week where it is expected to unveil its new iPad models.

Samsung launched the <u>Galaxy S21</u> flagship smartphone series as well as <u>Galaxy SmartTag</u> Bluetooth trackers at its <u>first Galaxy Unpacked event of 2021</u> in January. The company hosted its <u>second Galaxy Unpacked version</u> of the year in March where it unveiled the <u>Galaxy A52</u> and <u>Galaxy A72</u> smartphones. <u>Click here to view video</u>

Is MacBook Air M1 the portable beast of a laptop that you always wanted? We discussed this on <u>Orbital</u>, the Gadgets 360 podcast. Orbital is available on <u>Apple Podcasts</u>, <u>Google Podcasts</u>, <u>Spotify</u>, and wherever you get your podcasts.

Page 29 of 62 © 2022 Factiva, Inc. All rights reserved.

		iew v	

Document NDTVIN0020210414eh4e0005v



online news

Samsung Updating Odyssey G9 Premium Gaming Monitor - MiniLED Technology, First DisplayHDR 2000 Certification?

224 words 12 April 2021 ETMAG.com FMETMA English

Copyright 2021 EUROTRADE Media Co., Ltd., All Rights Reserved.

A listing has surfaced on Chinese website Taobao featuring what is being described as the 2021 update for the ultra-premium Samsung Odyssey G9 gaming monitor. It keeps the DNA of the Odyssey G9 - that means the 49" VA panel, 5120×1440 resolution and 1000R curvature remain. The devil, as always, is in the details; the new monitor is expected to feature a MiniLED backlight solution featuring 2048 dimming zones, which should enable a contrast ratio of 4,000:1 and an eventual, first-of-its-kind DisplayHDR 2000 certification by VESA. The current maximum under the standard stands at DisplayHDR 1400, so it's quite the jump for maximum HDR quality. Other specs include a refresh rate as fast as 240 Hz with 1 ms response times, and support for NVIDIA's G-Sync Compatible badge as well as AMD's FreeSync Pro. 10-bit color depth and 95% of DCI-P3 color coverage are also part of the feature list.

The original, 2020 G9 is available for an already expensive \$1,799; however, its face-lifted 2021 cousin is now being listed at an egregious 29,999 RMB (around \$4,599). It could be just a pre-order placeholder while the official announcement from Samsung isn't done.

Document FMETMA0020210413eh4c00005



Lenovo's new gaming phone makes the Samsung Galaxy S21 Ultra look small

509 words 9 April 2021 Kuwait News Agency (Kuna) KUWNA English

© 2021 All Kuna Rights are Reserved. Provided by Syndigate info, an Albawaba.com company

Even if you're aware that gaming phones tend to be pretty massive mobiles, the new Lenovo Legion Phone Duel 2 will still surprise you with its size. It's the newest smartphone from the Lenovo Legion gaming hardware brand, following on from the original Phone Duel, which was once our top-ranked gaming phone.

This new phone takes some of its predecessor's features - it has a camera pop-up on its side, 90W fast charging from multiple USB-C ports, and multiple front speakers - and brings a few important changes too.

For one, the Lenovo Legion Phone Duel 2 is huge - its display is 6.92 inches across, even bigger than the giant Samsung Galaxy S21 Ultra with its 6.8-inch screen. The refresh ratio is 144Hz, which is a competitive rate, but another wild spec is its touch input rate at 720Hz, which is higher than any other phone. This means the display scans for your touch 720 times per second, making snap reactions in mobile games much more responsive.

Read our Lenovo Legion Phone 2 Duel hands on review

Check out our Asus ROG Phone 5 review

The iPhone 13 could be good for mobile games

The original Phone Duel, and a few other gaming phones, had physical triggers that you could map to improve gaming - not wanting to be beaten, the Phone Duel 2 has eight. There's four along the edge of the phone - two for each hand - as well as two on the back, and two on the screen. You can activate each by pressing, long-pressing or sliding, resulting in a huge number of combinations and buttons mapped.

There's also a built-in fan on the Legion Phone Duel 2, so the phone keeps itself cool while gaming, which uses twin fans.

(Image credit: TechRadar)

Aim to game

As well as all those top gaming features, the Lenovo Legion Phone Duel 2 has all the other specs of top mobile phones. It has the Snapdragon 888 chipset, 12GB or 16GB RAM, a 5,500mAh battery, 90W charging, a 64MP main camera, a 44MP front-facing camera, 5G connectivity and Wi-Fi 6 compatibility.

While Lenovo is still a relatively new player in the mobile gaming hardware market, it's starting to get a reputation for premium gaming phones, with top specs across the board... and a high price to match.

We know the phone's price in the UK, and it'll cost 699 for 12GB RAM and 256GB storage - that converts to around \$950 / AU\$1,240. There's also a 16GB RAM and 512GB storage model for 899, or roughly \$1,180 / AU\$1,550.

In other words this is a high-cost phone for the most dedicate mobile gamer, one which outstrips the competition in terms of spec and cost. We've briefly tested out the phone, and you can read about it in our hands-on Lenovo Legion Phone Duel 2 review.

Document KUWNA00020210409eh49000ma



Samsung Electronics Co. Ltd. Patent Issued for Method And Apparatus For Rendering Timed Text And Graphics In Virtual Reality Video (USPTO 10.958,890)

2,785 words 1 April 2021 Computer Weekly News COMWKN 6219 English

© Copyright 2021 Computer Weekly News via via VerticalNews.com

2021 APR 7 (VerticalNews) -- By a News Reporter-Staff News Editor at Computer Weekly News -- Samsung Electronics Co. Ltd. (Suwon-si, South Korea) has been issued patent number 10,958,890, according to news reporting originating out of Alexandria, Virginia, by VerticalNews editors.

The patent's inventors are Bouazizi, Imed (Frisco, TX); Budagavi, Madhukar (Plano, TX).

This patent was filed on March 21, 2018 and was published online on April 5, 2021.

From the background information supplied by the inventors, news correspondents obtained the following quote: "Two-dimensional videos often include timed text. Timed text is commonly called subtitles, closed captions, or open captions. Timed text is often utilized for the hearing impaired as well as a video or show where the dialog is not in the native language of the viewer. Timed text is a presentation of text that is synchronized to display simultaneously with the audio of the video.

"Timed text places text in videos without actually embedding the text itself within the video. This allows the timed text to be turned on and off, as well as offers the ability to display different languages while the same underlying video presentation is played.

"Virtual reality experiences are becoming prominent. For example, 360.degree. video is emerging as a new way of experiencing immersive video due to the ready availability of powerful handheld devices such as smartphones. 360.degree. video enables immersive 'real life,' 'being there' experience for consumers by capturing the 360.degree. view of the world. Users can interactively change their viewpoint and dynamically view any part of the captured scene they desire. Display and navigation sensors track head movement in real-time to determine the region of the 360.degree. video that the user wants to view."

Supplementing the background information on this patent, VerticalNews reporters also obtained the inventors' summary information for this patent: "This disclosure provides methods and apparatuses for rendering timed text and graphics in virtual reality video.

"In a first embodiment, an electronic device for rendering timed text within an omnidirectional video is provided. The electronic device includes a transceiver. The transceiver is configured to receive a signaling message including a flag indicating whether a position of the timed text within the omnidirectional video is dependent on a viewport of the omnidirectional video. The electronic device also includes a processor operably coupled to the transceiver. The processor is configured to determine whether the position of the timed text within the omnidirectional video is dependent on the viewport based on the flag. The processor is also configured to render the timed text within the omnidirectional video based on the determination.

"In a second embodiment a server for supporting timed text within omnidirectional video is provided. The server includes a processor. The processor is configured to generate a signaling message including a flag indicating whether a position of the timed text to be rendered within the omnidirectional video is dependent on a viewport of the omnidirectional video. The server also includes a communication interface operably coupled to the processor. The communication interface is configured to transmit the signaling message to an electronic device to indicate whether the position of the timed text within the omnidirectional video is dependent on the viewport for rendering of the timed text within the omnidirectional video.

"In a third embodiment, a method for rendering timed text within omnidirectional video is provided. The method includes receiving a signaling message including a flag indicating whether a position of the timed text within the omnidirectional video is dependent on a viewport of the omnidirectional video. The method also includes determining whether the position of the timed text within the omnidirectional video is dependent on the viewport based on the flag. The method further includes rendering the timed text within the omnidirectional video based on the determination.

"Other technical features may be readily apparent to one skilled in the art from the following figures, descriptions, and claims.

"Before undertaking the DETAILED DESCRIPTION below, it may be advantageous to set forth definitions of certain words and phrases used throughout this patent document. The term 'couple' and its derivatives refer to any direct or indirect communication between two or more elements, whether or not those elements are in physical contact with one another. The terms 'transmit,' 'receive,' and 'communicate,' as well as derivatives thereof, encompass both direct and indirect communication. The terms 'include' and 'comprise,' as well as derivatives thereof, mean inclusion without limitation. The term 'or' is inclusive, meaning and/or. The phrase 'associated with,' as well as derivatives thereof, means to include, be included within, interconnect with, contain, be contained within, connect to or with, couple to or with, be communicable with, cooperate with, interleave, juxtapose, be proximate to, be bound to or with, have, have a property of, have a relationship to or with, or the like. The term 'controller' means any device, system or part thereof that controls at least one operation. Such a controller may be implemented in hardware or a combination of hardware and software and/or firmware. The functionality associated with any particular controller may be centralized or distributed. whether locally or remotely. The phrase 'at least one of,' when used with a list of items, means that different combinations of one or more of the listed items may be used, and only one item in the list may be needed. For example, 'at least one of: A, B, and C' includes any of the following combinations: A, B, C, A and B, A and C, B and C, and A and B and C.

"Moreover, various functions described below can be implemented or supported by one or more computer programs, each of which is formed from computer readable program code and embodied in a computer readable medium. The terms 'application' and 'program' refer to one or more computer programs, software components, sets of instructions, procedures, functions, objects, classes, instances, related data, or a portion thereof adapted for implementation in a suitable computer readable program code. The phrase 'computer readable program code' includes any type of computer code, including source code, object code, and executable code. The phrase 'computer readable medium' includes any type of medium capable of being accessed by a computer, such as read only memory (ROM), random access memory (RAM), a hard disk drive, a compact disc (CD), a digital video disc (DVD), or any other type of memory. A 'non-transitory' computer readable medium excludes wired, wireless, optical, or other communication links that transport transitory electrical or other signals. A non-transitory computer readable medium includes media where data can be permanently stored and media where data can be stored and later overwritten, such as a rewritable optical disc or an erasable memory device.

"Definitions for other certain words and phrases are provided throughout this patent document. Those of ordinary skill in the art should understand that in many if not most instances, such definitions apply to prior as well as future uses of such defined words and phrases."

The claims supplied by the inventors are:

"What is claimed is:

- "1. An electronic device for rendering timed text within an omnidirectional video, the electronic device comprising: a display configured to display a portion of the omnidirectional video that corresponds to a viewport; a transceiver configured to receive a signaling message including a flag indicating whether a position of the timed text within the omnidirectional video is relative to the viewport of the omnidirectional video; and a processor operably coupled to the transceiver, the processor configured to: determine whether the position of the timed text within the omnidirectional video is relative to the viewport based on the flag; render the timed text at a fixed location within the omnidirectional video based on the determination that the timed text is not relative to the viewport; and control the display to display the timed text when the viewport overlaps the fixed location within the omnidirectional video.
- "2. The electronic device of claim 1, wherein: in response to determining that the position of the timed text is relative to the viewport, the processor is configured to identify, from the signaling message, parameters to adjust for a depth disparity of the timed text; and to render the timed text within the omnidirectional video, the processor is configured to render the timed text for display relative to the viewport based on the identified parameters.
- "3. The electronic device of claim 2, wherein, to render the timed text for display relative to the viewport, the processor is configured to render the timed text in a fixed location on a display that is independent of a viewing direction within omnidirectional video.
- "4. The electronic device of claim 2, wherein: to render the timed text for display relative to the viewport, the processor is configured to adjust for the depth disparity of the timed text by shifting a location of the timed text on a left half of a display and the timed text on a right half of the display, the timed text on the left half of the display is displaced left by the identified parameters, and the timed text on the right half of the display is displaced right by the identified parameters.

- "5. The electronic device of claim 1, wherein: in response to determining that the position of the timed text is not relative to the viewport, the processor configured to identify, from the signaling message, parameters to position the timed text within the omnidirectional video; and to render the timed text relative to the omnidirectional video, the processor is configured to render the timed text for display relative to the omnidirectional video based on the identified parameters.
- "6. The electronic device of claim 5, wherein: to render the timed text for display within the omnidirectional video, the processor is configured to render the timed text in the fixed location within the omnidirectional video, viewing of which is dependent on a viewing direction within the omnidirectional video, and the fixed location within the omnidirectional video is based on the identified parameters.
- "7. The electronic device of claim 5, wherein: to render the timed text for display relative to the omnidirectional video, the processor is configured to utilize a spherical coordinate system where a center of the omnidirectional video is located at a center of a sphere; generate a plane within the sphere, that is located at a distance from the center of the sphere and the plane is oriented perpendicular to a predetermined yaw and pitch based on the identified parameters; and the processor is configured to render the timed text on a position on the plane that is oriented based on a roll and centered on the plane.
- "8. The electronic device of claim 1, wherein to render the timed text within the omnidirectional video, the processor is configured to display text that is synchronized to a timing of the omnidirectional video.
- "9. A server for supporting timed text within omnidirectional video, the server comprising: a processor configured to generate a signaling message including a flag indicating whether a position of the timed text to be rendered within the omnidirectional video is relative to a viewport of the omnidirectional video; and a communication interface operably coupled to the processor, the communication interface configured to transmit the signaling message to an electronic device to indicate whether the position of the timed text within the omnidirectional video is relative to the viewport for rendering of the timed text within the omnidirectional video and when the flag indicates that the position of the timed text to be rendered within the omnidirectional video is not relative to the viewport, the timed text is to be rendered at a fixed location within the omnidirectional video.
- "10. The server of claim 9, wherein when the signaling message includes the flag indicating that the position of the timed text is relative to the viewport, the processor is configured to generate parameters to adjust for a depth disparity of the timed text.
- "11. The server of claim 10, wherein: the processor is configured to indicate in the signaling message that the timed text is in a fixed location within the viewport, the fixed location is independent of a viewing direction within omnidirectional video.
- "12. The server of claim 9, wherein: when the signaling message includes the flag indicating that the position of the timed text is not relative to the viewport, the processor is configured to generate parameters to position the timed text within the omnidirectional video, and the position of the timed text relative to the omnidirectional video is fixed in the omnidirectional video.
- "13. A method for rendering timed text within omnidirectional video, the method comprising: receiving a signaling message including a flag indicating whether a position of the timed text within the omnidirectional video is relative to a viewport of the omnidirectional video; determining whether the position of the timed text within the omnidirectional video is relative to the viewport based on the flag; rendering the timed text at a fixed location within the omnidirectional video based on the determination that the timed text is not relative to the viewport; and displaying the timed text when the viewport overlaps the fixed location within the omnidirectional video.
- "14. The method of claim 13, further comprising: in response to determining that the position of the timed text is relative to the viewport, identifying, from the signaling message, parameters to adjust for a depth disparity of the timed text, wherein rendering the timed text within the omnidirectional video further comprises rendering the timed text for display relative to the viewport based on the identified parameters.
- "15. The method of claim 14, wherein rendering the timed text for display relative to the viewport further comprises rendering the timed text in a fixed location on a display that is independent of a viewing direction within omnidirectional video.
- "16. The method of claim 14, wherein: rendering the timed text for display relative to the viewport comprises adjusting for the depth disparity of the timed text by shifting a location of the timed text on a left half of a display and the timed text on a right half of the display, the timed text on the left half of the display is displaced left by the identified parameters, and the timed text on the right half of the display is displaced right by the identified parameters.

- "17. The method of claim 13, wherein: in response to determining that the position of the timed text is not relative to the viewport, identifying, from the signaling message, parameters to position the timed text within the omnidirectional video; and rendering the timed text relative to the omnidirectional video comprises rendering the timed text for display relative to the omnidirectional video based on the identified parameters.
- "18. The method of claim 17, wherein: rendering the timed text for display in the omnidirectional video comprises rendering the timed text in the fixed location within the omnidirectional video, viewing of which is dependent on a viewing direction within the omnidirectional video, and the fixed location within the omnidirectional video is based on the identified parameters.
- "19. The method of claim 17, wherein rendering the timed text for display relative to the omnidirectional video comprises: utilizing a spherical coordinate system where a center of the omnidirectional video is located at the center of a sphere; generating a plane within the sphere, that is located at a distance from the center of the sphere and the plane is oriented perpendicular to a predetermined yaw and pitch based on the identified parameters; and rendering the timed text on a position on the plane that is oriented based on a roll and centered on the plane.
- "20. The method of claim 13, wherein rendering the timed text within the omnidirectional video comprises displaying text that is synchronized to a timing of the omnidirectional video."

For the URL and additional information on this patent, see: Bouazizi, Imed; Budagavi, Madhukar. Method And Apparatus For Rendering Timed Text And Graphics In Virtual Reality Video. U.S. Patent Number 10,958,890, filed March 21, 2018, and published online on April 5, 2021. Patent URL: http://patft.uspto.gov/netacgi/nph-

Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=10,958,890.PN.&OS=PN/10,958,890RS=PN/10,958,890

Keywords for this news article include: Business, Software, Computers, Electronics Companies, Samsung Electronics Co. Ltd..

Our reports deliver fact-based news of research and discoveries from around the world. Copyright 2021, NewsRx LLC

Document COMWKN0020210401eh410008x

Samsung Display; Samsung Display Intends to Lead the Gaming Display Market as Demand for At-home Entertainment Continues to Spiral

532 words
30 March 2021
Electronics Newsweekly
ELECWK
69
English

© Copyright 2021 Electronics Newsweekly via VerticalNews.com

2021 MAR 30 (VerticalNews) -- By a News Reporter-Staff News Editor at Electronics Newsweekly -- Amid exponential growth of the gaming industry that is being fueled mostly by more stay-at-home time, Samsung Display announced that it will aggressively expand its presence in the gaming smartphone and laptop (note PC) markets with OLED displays optimized for high-resolution gaming content.

With more people practicing social distancing by staying at home, the number of online gamers has surged, and end-product manufacturers are scrambling to launch gaming IT devices to meet demand for mobile displays of the highest quality.

"Our OLED Display has valuable features befitting premium gaming content, such as fast response time and less blue light emissions," said Ho-jung Lee, vice president of Mobile Display Product Planning Team at Samsung Display. "Consumers will quickly see that the Samsung 'OLED for gaming' experience delivers the most advanced mobile gaming display on the market today," he added.

In addition, Samsung Display said that its 'OLED for gaming' display is able to incorporate Adaptive Frequency technology in smartphones, which optimally distributes available power by the type of application in use at any given moment, and VRR (Variable Refresh Rate) technology in laptops, which automatically adjusts the refresh rate according to the video content in each and every frame.

After entering the laptop market with OLED displays in 2019, Samsung Display has been supplying 15.6-inch UHD OLED panels to major global producers of gaming laptops, such as Razer's Blade 15. Also, the Blade Stealth 13, unveiled last year by Razer, features a Samsung Display 13.3-inch FHD OLED panel.

Furthermore, last week ASUS unleashed ROG Phone 5 (Republic of Gamers Phone 5) on which Samsung Display's 6.78-inch OLED panel is a major component. "The latest ROG Phone 5 mounted the latest Samsung OLED display that befits the highest-spec hardware, aiming to deliver an incomparable gaming experience to consumers." said Bryan Chang, General Manager of Smartphone Business Unit at ASUS. "The OLED display featuring faster response time and higher refresh rate will become a new trend in the gaming IT device market," he added.

The Samsung OLED laptop display panel is made especially for games with fast frame transitions, as it features a refresh rate higher than 120Hz and has been certified by SGS for seamless (smoother-looking) image quality.

According to SGS's 'Seamless Display' test results, the Samsung Display OLED panel registered the highest specifications in the industry in two categories, featuring a blur length of less than 0.7mm and an MPRT* * of less than 11 milliseconds (thousandths of a second) during high-speed transmission.

Also, the new Samsung Display panel received an "Eye Care Display" certification from SGS for reducing blue light emission to 6.5 percent. This improved eye-protective feature is great news to consumers playing games for long hours.

Keywords for this news article include: Business, Technology, Entertainment, Samsung Display, Electronics Companies.

Our reports deliver fact-based news of research and discoveries from around the world. Copyright 2021, NewsRx LLC

Document ELECWK0020210330eh3u00148



Samsung Neo QLEDs Receive Industry-First 'Gaming TV Performance' Certification from VDE in Germany

442 words
19 March 2021
ENP Newswire
ENPNEW
English
© 2021, Electronic News Publishing. All Rights Reserved.

Release date - 18032021

Four models from Samsung's 2021 Neo QLED TV have received the distinction, reflecting game-changing performance of a sub-10ms input lag and HDR with brightness of higher than 1000 nits.

Samsung Electronics announced that the 2021 Neo QLED became the first TV to receive certification for Gaming TV Performance from Verband Deutscher Elektrotechniker (VDE), a well-regarded electrical engineering certification institute in Germany.

Four models from the 2021 Neo QLED lineup (QN900, QN800, QN90, QN85) received the certification, a distinction given for 'Low Input Lag' and 'HDR with brightness of higher than 1,000 nits.' Each of the TVs went through a rigorous testing process, ultimately earning the certification for less than 10ms of input lag during every scene of gameplay. Input lag refers to the period of time from when an electrical signal is sent from the game pad to when it is displayed on the screen. A TV with lower input lag will provide gamers with a more immersive gaming experience.

In addition, Samsung's Neo QLED also received the certification for HDR with brightness over 1,000 nits. FreeSync Premium Pro also adds to the HDR support, making bright scenes brighter and dark scenes darker to offer optimized contrast. HDR technology is often considered as one of the most important features among gamers.

Apart from low input lag and HDR support with brightness of higher than 1,000 nits, Samsung's Neo QLED TVs also reflect a number of new and exciting gaming features.

Samsung's Neo QLED TVs deliver more accurate details, deeper blacks and incredible color expression due to their 100% color volume and 12-bit backlight control. Wide Game View and Game Bar, both industry firsts, deliver a broader viewing experience with 21:9 and 32:9, and the ability to quickly check a variety of gaming information.

In addition, Samsung's Neo QLED TVs deliver fast game motion at 120Hz with Motion Xcelerator Turbo+, even during gameplay with fixed UI. Sound has also been enhanced through Al-based surround-sound and object tracking sound (OTS+), delivering the ultimate immersive gaming experience.

Yonghoon Choi, Executive Vice President of the Visual Display Business at Samsung Electronics said, 'An increasing number of gamers look for large screen displays with high-end picture quality when shopping for a TV, and Samsung continues to lead the TV-focused gaming experience.'

For more information on Samsung's 2021 Neo QLED TV, please visit www.samsung.com.

[Editorial queries for this story should be sent to newswire@enpublishing.co.uk]

Document ENPNEW0020210319eh3j00063



Entertainment

Samsung Display supplies OLED display for Asus gaming phone

Song Su-hyun (song@heraldcorp.com) 265 words 17 March 2021 The Korea Herald KORHER English (c) 2021 The Korea Herald

Samsung Display said Tuesday that it has supplied for the first time its organic light-emitting diode displays for Asus' newest gaming smartphone ROG Phone 5.

The Taiwanese computer hardware company's latest ROG Phone 5 sports the Korean panel maker's 6.78-inch OLED screen, which is designed to support seamless streaming of fast-rate high-resolution gaming content.

Samsung's mobile display that supports over a 120 Hz refresh rate has been certified as a Seamless Display by SGS, a Switzerland-based certification organization.

According to the Swiss institution, the display has a blur length of 0.7 millimeters and less, while the motion picture response time was 11 milliseconds at the maximum. The MPRT is the industry's fastest.

Bryan Chang, Asus' smartphone business head, said the company chose Samsung's latest OLED displays to provide customers with differentiated gaming experiences.

"The Samsung OLED displays with quick response time and high refresh rate would be a new trend for IT gaming devices," he said.

Samsung plans to elevate its technologies for OLED display for gaming amid a growing demand.

"In addition to the adaptive frequency technology that automatically adjusts power consumption and picture quality, Samsung will complete a variable refresh rate technology that adjusts refresh rates in accordance with the number of frames to provide better gaming experiences for end users," said Lee Ho-jung, head of mobile display products at Samsung Display.

Click here to see image

ASUS ROG Phone 5 (Samsung Display)

Document KORHER0020210316eh3h001md



Samsung Display aims to win over smartphone gaming market

376 words
16 March 2021
Korea Times
KORTIM
English
(c) 2021 Korea Times. All rights reserved.

Image of the ASUS ROG Phone 5 / Courtesy of Samsung DisplayBy Kim Hyun-binAn increase in the amount time spent at home due the COVID-19 pandemic has led to a surge in the number of online game users. To meet the rise in demand, IT and electronics companies have been launching new devices to appeal to online gamers. Samsung Display entered the OLED notebook market in 2019, supplying 15.6 inch UHD OLED screens for the world's smallest gaming laptop, the Razer Blade 15.Last year, Razer released a new gaming notebook PC called Blade Stealth 13 which utilizes Samsung Display's 13.3 inch FHD OLED screen. Last week, ASUS unveiled a gaming smartphone called the ROG Phone 5 which also features Samsung Display's 6.78 inch OLED screen. "The new ROG Phone 5 features the best hardware and Samsung's gaming OLED screen to provide the best gaming experience to users," said Bryan Chang, head of ASUS' smartphone business.

"We believe Samsung's latest OLED gaming IT devices could become the next trend setter." The display is equipped with a 120Hz refresh rate and is most suitable to run gaming content due to its swift transition capabilities. The monitor's seamless and natural screen resolution helped win Seamless Display certification by Societe Generale de Surveillance (SGS). SGS is a global certification, inspection and verification company based in Switzerland that was established in 1878. According to SGS, high-definition tests and blur length were less than 0.7mm, while the Motion Picture Response Time (MPRT) was less than 11 milliseconds, the industry's lowest specifications. To better suit gamers playing for extended periods of time, Samsung Display reduced the blue light ratio below 6.5 percent, which also earned the screen an "Eye Care" verification from the SGS. "The OLED offers a fast response rate and a low ratio of blue light for users to enjoy various gaming content," a Samsung Display official said. "Samsung's gaming OLED satisfies smartphone gamers with its reduced power consumption and high resolution using adaptive frequency technologies. We plan to showcase new technologies utilizing a variable refresh rate and further enhanced resolution to improve the gaming experience."

Document KORTIM0020210317eh3g0000g

Get \$100 off the Samsung Odyssey G7 Gaming Monitor

Jason England 293 words 16 March 2021 Tom's Hardware TOMHA English © 2021. Future US Inc. All Rights Reserved.

Right now at Microsoft, get \$100 off the Samsung Odyssey G7 gaming monitor — taking the price down to just \$599.

When it comes to the <u>best gaming monitors</u>, Samsung ranks high with its G7 Odyssey monitor thanks to the panel's buttery smooth refresh rate, excellent <u>HDR</u> and razor sharp <u>WQHD</u> resolution.

But, you know what would make it better? A \$100 price cut. Good thing you can buy one now for just \$599!

- * More: Best 4K gaming monitors
- * Best monitor deals

toCheeeek

Save big on this Editor's Choice monitor

Samsung Odyssey G7: was \$699, now \$599 at Microsoft

This 5-star WQHD gaming monitor does everything well, from its curved construction, color gamut and blue light filtering technology to the 240Hz refresh rate, quick response time and HDR.

We were so enamored with this monitor in our <u>Samsung Odyssey G7 review</u> that we gave it an Editor's choice award, which explains why we're spotlighting it now. Its striking design will stand out boldly in any setup, (though it does have VESA-compatible mounting if you'd prefer not to use a stand).

And that's nothing compared to the panel itself — a 27-inch WQHD panel with a 1000R curve and 10-bit color covering 95% of the DCI-P3 gamut. Throw in DisplayHDR 600, and the only potential downside here is the VA construction.

But throw in a 240Hz refresh rate with adaptive sync and a 1ms GTG response time, and you've got a great competition ready display for less. So, if you're an enthusiast looking to get the competitive edge, save yourself some cash and grab this top tier model.

Samsung G7 Odyssey (Samsung)

Document TOMHA00020210316eh3g000dx



Samsung Display targets gaming markets with OLED panels

Balakumar K 459 words 16 March 2021 TechRadar TECHR English

© 2021. Future Publishing Ltd. All Rights Reserved

Samsung Display has said its OLED Display has valuable features befitting premium gaming content, such as fast response time and less blue light emissions.

Samsung Display has announced that it will aggressively expand its presence in the gaming smartphone and laptop markets with OLED (organic light-emitting diode) displays optimized for high-resolution gaming content.

Samsung Display, a major display maker, said its 6.78-inch OLED panel is being used in Asus' Republic of Gamers (ROG) Phone 5 launched last week, and it aims to sell more OLED displays to those who make gaming IT devices.

Samsung has also supplied 15.6-inch UHD OLED panels to top gaming laptops, including Razer.

"Our OLED Display has valuable features befitting premium gaming content, such as fast response time and less blue light emissions," Lee Ho-jung, vice president of Samsung Display's mobile display product planning team, was quoted as saying in a company statement.

- * These are the best gaming laptops of 2021
- * Check out our list of the best laptops for graphic design professionals

Better protection for eye with new Samsung OLED panel

Samsung said its OLED laptop display panel is made especially for games with fast frame transitions.

The company said its latest display supports a refresh rate of 120Hz or higher, and is specialized for game content with fast screen switching, and obtained 'Seamless Display' certification from SGS, and has been recognized for its seamless and natural image quality.

It claimed its OLED panel recorded the highest specifications in the industry in two categories, with a blur length of less than 0.7 millimeter and motion picture response time of less than 11 milliseconds.

Samsung Display panel also earned an "Eye Care Display" certification from SGS for reducing blue light emission to 6.5%, offering better eye protection to users.

Adaptive frequency tech in Samsung OLED panel

In addition, Samsung Display said that its 'OLED for gaming' display is able to incorporate Adaptive Frequency technology in smartphones, which optimally distributes available power by the type of application in use at any given moment, and VRR (Variable Refresh Rate) technology in laptops, which automatically adjusts the refresh rate according to the video content in each and every frame.

Samsung Display entered OLED panel segment in 2019, and has been supplying 15.6-inch UHD OLED panels to major global producers. Also, the Blade Stealth 13, unveiled last year by Razer, features a Samsung Display 13.3-inch FHD OLED panel.

Via

* Get up close with consumer tech news that you can use, latest reviews and buying guides. Follow TechRadar India on Twitter, Facebook and Instagram!

Screen capture of the launching video of 'ROG Phone 5' (Samsung Display)

Document TECHR00020210316eh3g000dx



Newegg PC gaming sale: save on Intel processors, Samsung SSDs, Corsair RAM and more

Tabitha Baker 777 words 13 March 2021 TechRadar TECHR English

© 2021. Future Publishing Ltd. All Rights Reserved

Update your gaming PC for less with these excellent deals from Newegg's builder's sale. Hurry though, these offers end on Monday.

If you're using your weekend to put together the custom gaming PC of your dreams, you'll want to check out Newegg's builder's sale. Cutting prices across a range of components and accessories, you'll find RAM, Intel processors, cases, cooling systems, storage, and motherboards up to 50% off right now.

* Browse the full Newegg builder's sale - offers end Monday

That's perfect whether you're building your first rig or switching out some aging gear. GPUs are notably absent from the proceedings, in case you hadn't already guessed. But if you're looking to build around those stock shortages you'll certainly find some offers to suit here.

Corsair Vengeance RAM can be found <u>for as little as \$44.99</u>, Intel's Comet Lake processors are <u>discounted across the range</u>, and Samsung internal SSDs are <u>starting at \$39.99</u> this weekend. You'll find the full roundup of all these gaming PC sales just below though.

We're also showing you how to put it all together once it arrives, with our guide to building your own PC.

Not in the US? Scroll down for more gaming PC deals in your region.

This weekend's best gaming PC build sales

toCheeeek

Intel desktop processors: up to 2 6% off at Newegg

Newegg is shifting stock of its 10th generation Comet Lake processors this weekend, offering everything from a hexacore 2.9GHz i5 for just \$145 (with promo code 3BDMDSL46) to the octa-core 2.9GHz i7 for \$274.99 (with promo code 3BDMDSL47). There's plenty more up for grabs here as well.

toCheeeek

Corsair desktop RAM: up to 22% off at Newegg

You'll find a range of Corsair Vengeance LPX and Vengeance RGB RAM strips up to \$50 off this weekend. That biggest discount sits on 32GB (two lots of 16GB) of Corsair Vengeance RGB Pro SL DDR4 SDRAM, bringing the <u>final price to \$169.99</u> (with promo code 3BDMDSL93). Of course, you'll find other configurations on sale right now as well.

toCheeeek

Corsair computer cases: up to 31% off at Newegg

Corsair PC cases are starting <u>at just \$74.99 right now</u>, with some excellent designs on offer for up to 31% off. From tempered glass to pre-installed RGB cooling systems, you'll find a range of features across full towers and cases.

toCheeeek

Cooler Master cooling accessories: up to 57% off at Newegg

From super cheap RGB fans to liquid cooling systems and components, you'll find up to 57% off a range of Cooler Master accessories in Newegg's gaming PC builder's sale. Plus, you can take advantage of extra

savings through rebate cards here as well, leading to excellent offers like this MasterLiquid ML280 dropping from \$134.99 to \$84.99.

toCheeeek

MSI AMD motherboards: up to 9% off at Newegg

The MSI X570-A Pro and the MSI B450 Tomahawk Max are both discounted in this weekend's gaming PC sales. You'll also find extra discounts through rebate cards of up to \$30, as well, which means you can pick up the X570 for just \$139.99.

toCheeeek

Samsung internal SSDs: up to 13% off at Newegg

Sure, the 250GB 870 EVO Series internal SSD is just \$39.99, but you can also pick up the 1TB Samsung 980 Pro M.2 2280 PCI-Express Gen 4 for \$199.99 right now as well. Whatever space or speed you need, you'll find a range of discounts up for grabs this weekend.

toCheeeek

Western Digital desktop internal hard drives: up to 50% off at Newegg desktop internal hard drives:

If you're going for bigger but slower storage, you'll find a range of Western Digital's internal hard drives on sale this weekend for some excellent prices. You can grab everything from a super cheap 2TB SATA drive (at 5400 RPM) for half price at \$49.99 to a 10TB 7200RPM drive for \$279.99 (with promo code 3BDMDSL62).

More gaming PC deals

We're also rounding up all the latest <u>cheap PC games</u> for more discounts, as well as the best <u>cheap gaming mouse sales</u>, <u>gaming keyboard deals</u> and <u>gaming monitor prices</u>. To give your setup a full refresh, though, check out the latest <u>gaming desk deals</u>.

We're also rounding up the latest processor deals and GPU prices as well.

cheap gaming PC build deals sales price (Future)

Document TECHR00020210313eh3d0018h



Asus ROG Phone 5 is a gaming phone that rivals Samsung's S21

David Lumb 603 words 10 March 2021 TechRadar TECHR English

© 2021. Future Publishing Ltd. All Rights Reserved

The Asus ROG 5 is the best gaming phone on the market with novel features and perks that make it a great handset for binging media, too.

The <u>Asus ROG Phone 5</u> is the brand's latest gaming phone, but a ton of little improvements add up to the most powerful Android smartphone released yet in 2021 – which can even outperform the <u>Samsung Galaxy</u> S21 in some benchmarks.

That's no surprise given the phone packs some monstrous specs: all versions of the phone pack a <u>Qualcomm Snapdragon 888</u> chipset and the basic model can have 8GB, 12GB, or 16GB of RAM. There's also two pricier editions of the phone: the Asus ROG 5 Pro, which comes in 16GB of RAM, and the limited-run Asus ROG 5 Ultimate, featuring a world-first 18GB of RAM.

Those pricier versions come with a slightly more refined design and OLED panel on the back to display a customizable message or logo. But even the stock Asus ROG 5 is powerful and versatile, with ultrasonic shoulder buttons, fantastic speakers, wildly fast 65W recharging for its 6,000mAh battery – and a 3.5mm headphone jack.

- * Read our Asus ROG Phone 5 review
- * Best gaming phones: the top gaming handsets you can buy right now
- * The Nubia Red Magic 6 is here, with the best screen of any gaming phone

With big specs and features comes big prices: the baseline Asus ROG 5 starts at €799 (around \$950 / £680 / AU\$1,230) for 8GB of RAM and 128GB of storage, €899 (around \$1,070 / £770 / AU\$1,400) for 12GB RAM and 256GB storage, and €999 (around \$1,200 / £850 / AU\$1,550) for 16GB RAM and 256GB of storage.

The fancier versions are priced even higher, with the Asus ROG 5 Pro costing €1,199 (around \$1,430 / £1,030 / AU\$1,850) for 16GB RAM and 512GB storage, putting it around the same price as the Samsung Galaxy S21 Ultra. The Asus ROG 5 Ultimate's price tag is suitably supreme at €1,299 (around \$1,550 / £1,100 / AU\$2,000) for 18GB RAM and 512GB storage.

The Asus ROG 5 will be released in March, with the Asus ROG 5 Pro following in April and the Asus ROG 5 Ultimate coming in May – but only in limited quantities. We've yet to hear exact pricing for the US, UK or Australia but we're hoping to hear more soon.

Click to view image (Image credit: Future)

The Asus ROG 5: for gamers and media fans, but not shutterbugs

The Asus ROG 5 is designed with mobile gamers in mind with hardware and software perks, but there's plenty in the phone that appeal to more mainstream consumers, from the extensive battery life to impressive sound from the pair of forward-facing speakers.

In many ways, the ROG 5 is a leading Android smartphone that rivals the Samsung Galaxy S21 range.

But not in photography: the ROG 5's triple rear camera doesn't include a telephoto lens, putting it at a utility disadvantage compared to the Samsung S21's 30x 'Space Zoom' capability – let alone the generally superior photo processing software in Samsung's phones.

Like its predecessors, the ROG 5 focuses on gaming, not cameras, which is a trade-off that may be fine with some consumers, but should be kept in mind for those who are shopping for the best camera phones.

* Stay up to date on tech with the TechRadar newsletter

	Asus	ROG 5 ((Future)
--	------	---------	----------

Document TECHR00020210310eh3a000pa



Mobiles

Samsung Galaxy A52, <mark>Samsung</mark> Galaxy A72 Launch Expected on March 17 as Company Schedules Virtual Event

Jagmeet Singh 600 words 10 March 2021 11:21 NDTV NDTVIN English

Copyright. 2021. NDTV Convergence Ltd., New Delhi, India.

Samsung Galaxy A52 and Galaxy A72 launch is expected on March 17 during a virtual event that the company is hosting. The event, which the South Korean company calls the Galaxy Awesome Unpacked, will be livestreamed virtually via Samsung's official channel on YouTube. Samsung Galaxy A52 and Galaxy A72 are among the most anticipated smartphones of 2021 and have been subject to various leaks and rumours. The phones are speculated to have 4G and 5G versions and are expected to come under Samsung's mid-range segment. In addition to the forthcoming launch event, an unboxing video of the Samsung Galaxy A52 has emerged on YouTube. The Samsung Galaxy A52 4G model has also reportedly appeared on Google Play Console with some specifications.

The Galaxy Awesome Unpacked event will take place at 10am ET (8:30pm IST) on Tuesday, March 17. It will be livestreamed through Samsung's YouTube channel. The livestream will also be accessible through the Samsung Newsroom site.

Samsung Galaxy Awesome Unpacked event is scheduled for March 17

Photo Credit: Samsung

Although <u>Samsung</u> hasn't clearly mentioned any details about the products it is set to launch at the event, the word "Awesome" in the title suggests the debut of new Galaxy A-series phones. These are expected to be the <u>Samsung Galaxy A52</u> and the <u>Galaxy A72</u> if we go by the recent reports.

"Join us on March 17 for the Galaxy Awesome Unpacked to hear how Samsung Electronics is bringing Awesome to everyone," the company <u>said</u> while announcing the launch event on the Samsung Newsroom site.

The March 17 launch date for the Samsung Galaxy A52 and the Galaxy A72 was also recently tipped online.

Just days ahead of its expected launch, the <u>Samsung Galaxy A52 5G</u> has <u>appeared</u> in an unboxing video that has been posted on YouTube by mobile phones-focussed Moboaesthetics. The video shows the new Samsung phone purportedly along with its retail box and in-box contents. This includes a 15W fast charger, though customers are said to have the option to upgrade to a faster, more powerful 25W charger.

The purported retail box of the Samsung Galaxy A52 also includes a standard USB Type-A to USB Type-C cable and a TPU case. Further, the phone will come with <u>IP67 rating</u> that makes it a dust- and water-resistant device. It will have a hole-punch display design.

The unboxing video also shows the Samsung Galaxy A52 5G running PUBG Mobile and Call of Duty without any lag. Click here to view video

Separately, MySmartPrice reports that the Samsung Galaxy A52 4G has appeared on Google Play Console with the model number a52q. The online listing shows that the phone carries Qualcomm SM7125, which is part number of the Qualcomm Snapdragon 720G SoC. The phone is listed to have 8GB of RAM, a full-HD+ (1,080x2,009 pixels) display, and Adreno 618 GPU. It will also apparently run on Android 11.

The Samsung Galaxy A52 — along with the Galaxy A72 — is expected to launch in markets <u>including India</u> shortly after the global launch next week. <u>Support pages</u> of both phones recently appeared in the UAE to suggest their imminent debut. <u>Click here to view video</u>

Is Samsung Galaxy S21 Ultra the most complete Android phone yet? We discussed this on <u>Orbital</u>, our weekly technology podcast, which you can subscribe to via <u>Apple Podcasts</u>, <u>Google Podcasts</u>, or <u>RSS</u>, <u>download the episode</u>, or just hit the play button below.

Page 47 of 62 © 2022 Factiva, Inc. All rights reserved.

Document NDTVIN0020210310eh3a0002t

Samsung Electronics Co. Ltd. "Apparatuses And Methods For Establishing Virtual Reality (Vr) Call Between Caller Vr Device And Callee Vr Device" in Patent Application Approval Process (USPTO 20210049821)

2,085 words 9 March 2021 Electronics Newsweekly ELECWK 578 English

© Copyright 2021 Electronics Newsweekly via VerticalNews.com

2021 MAR 9 (VerticalNews) -- By a News Reporter-Staff News Editor at Electronics Newsweekly -- A patent application by the inventors CHEBOLU, Praveen (Bangalore, IN); SANTHEBENUR VASUDEVAMURTHY, Varun Bharadwaj (Bangalore, IN); CHINTHALAPUDI, Srinivas (Bangalore, IN); VRIND, Tushar (Bangalore, IN); BHAN, Abhishek (Bangalore, IN); RAJAN, Nila (Bangalore, IN), filed on November 4, 2019, was made available online on February 18, 2021, according to news reporting originating from Washington, D.C., by VerticalNews correspondents.

This patent application is assigned to Samsung Electronics Co. Ltd. (Suwon-sl, South Korea).

The following quote was obtained by the news editors from the background information supplied by the inventors: "Virtual reality (VR) content stitching is the process of combining multiple overlapping media contents such as images and video to create a single 360-degree media content such as 360-degree image and 360-degree video. However, the VR content stitching presently available on mobile devices such as smart phones and laptops consumes lot of power.

"Further, present mobile devices are capable of live streaming VR calls. Such a capability is available via either specific applications or external 360-degree cameras coupled with the mobile devices. However, during such live streaming VR calls, a 360-degree effect is achievable either through sharing complete data covering all angles with a receiver; or through an external server sending views corresponding to desired angles based on a receiver's request. This leads to higher consumption of power and bandwidth.

"Thus, it would be desirable to provide a solution to overcome above-mentioned deficiencies."

In addition to the background information obtained for this patent application, VerticalNews journalists also obtained the inventors' summary information for this patent application: "This summary is provided to introduce a selection of concepts in a simplified format that are further described in the detailed description of the present disclosure. This summary is not intended to identify key or essential inventive concepts of the claimed subject matter, nor is it intended for determining the scope of the claimed subject matter. In accordance with the purposes of the disclosure, the present disclosure as embodied and broadly described herein, describes methods and apparatuses for establishing a virtual reality (VR) call between a caller VR device and a callee VR device.

"In accordance with some example embodiments of the inventive concepts, a method for establishing a VR call between a caller VR device and a callee VR device is disclosed. The method includes determining which of the caller VR device or the callee VR device should perform a stitching operation associated with the VR call based on a first plurality of parameters associated with the callee VR device and a second plurality of parameters associated with the caller VR device, and causing transmission of one of a plurality of media contents or a stitched media content from the caller VR device to the callee VR device after establishment of the VR call based on the determining.

"In accordance with some example embodiments of the inventive concepts, an apparatus for establishing a VR call between a caller VR device and a callee VR device is disclosed. The apparatus includes at least one processor configured to execute computer readable instructions to determine which of the caller VR device and the callee VR device should perform a stitching operation associated with the VR call based on a first plurality of parameters associated with the callee VR device and a second plurality of parameters associated with the caller VR device, cause transmission of one of a plurality of media contents or a stitched media content from the caller VR device to the callee VR device after establishment of the VR call based on the determination.

"Some advantages of the present disclosure include, but not limited to, enabling offloading of the stitching process based on a capability discovery process prior to establishing a VR call. This enables optimizing or improving performance of resource(s) used for rendering the VR call. This leads to enhanced user-experience.

"These aspects and advantages will be more clearly understood from the following detailed description taken in conjunction with the accompanying drawings and claims."

The claims supplied by the inventors are:

- "1. A method for establishing a virtual reality (VR) call between a caller VR device and callee VR device, the method comprising: determining which of the caller VR device or the callee VR device should perform a stitching operation associated with the VR call based on a first plurality of parameters associated with the callee VR device and a second plurality of parameters associated with the caller VR device; and causing transmission of one of a plurality of media contents or a stitched media content from the caller VR device to the callee VR device after establishment of the VR call based on the determining.
- "2. The method as claimed in claim 1, wherein the determining determines that the callee VR device should perform the stitching operation.
- "3. The method as claimed in claim 2, further comprising: transmitting a stitching request to the callee VR device.
- "4. The method as claimed in claim 3, wherein the stitching request is transmitted via Session Initiation Protocol (SIP) messaging.
- "5. The method as claimed in claim 3, further comprising: receiving a response indicative of acceptance of the stitching request from the callee VR device, wherein the causing transmission causes transmission of the plurality of media contents such that the callee VR device is caused to perform the stitching operation, the stitching operation including stitching the plurality of media contents to form the stitched media content for rendering during the VR call.
- "6. The method as claimed in claim 3, further comprising: receiving a response indicative of rejection of the stitching request from the callee VR device, and causing the caller VR device to perform the stitching operation, the stitching operation including stitching the plurality of media contents to form the stitched media content, wherein the causing transmission causes transmission of the stitched media content for rendering during the VR call.
- "7. The method as claimed in claim 1, wherein the determining determines the caller VR should perform the stitching operation.
- "8. The method as claimed in claim 7, further comprising: causing the caller VR device to perform the stitching operation, the stitching operation including stitching the plurality of media contents to form the stitched media content.
- "9. The method as claimed in claim 8, wherein the causing transmission causes transmission of the stitched media content for rendering during the VR call.
- "10. The method as claimed in claim 1, further comprising: receiving a notification from the callee VR device during the VR call, the notification indicative of a region of interest corresponding to one of the plurality of media contents or the stitched media content; identifying a current view point of the caller VR device; adjusting the current view point of the caller VR device towards the region of interest to establish an adjusted view point; and causing transmission of one of a plurality of adjusted media contents or a stitched adjusted media content as viewed from the adjusted view point for rendering during the VR call.
- "11. The method as claimed in claim 10, wherein the notification is received via one of SIP messaging or a Real-Time Transport Protocol (RTP) Control Protocol (RTCP) extension.
- "12. The method as claimed in claim 10, wherein the notification is received from the callee VR device subsequent to detection of a view-change event at the callee VR device during the VR call, the view-change event corresponding to one of: movement of the callee VR device from a first position to a second position during the VR call, eye gaze movement, reception of a defined gesture input, or reception of a defined audio input.
- "13. The method as claimed in claim 1, wherein each of the first plurality of parameters and the second plurality of parameters includes one or more of a remaining amount of power stored in a battery, a communication link signal quality, an available amount of bandwidth, an amount of available memory, a processing speed of a processor, a device location, or an indication of whether the stitching operation is supported.
- "14. The method as claimed in claim 1, wherein the determining, and the causing transmission is performed by at least one of the caller VR device, the callee VR device, or a server.

- "15. An apparatus for establishing a virtual reality (VR) call between a caller VR device and a callee VR device comprising: at least one processor configured to execute computer readable instructions to, determine which of the caller VR device and the callee VR device should perform a stitching operation associated with the VR call based on a first plurality of parameters associated with the callee VR device and a second plurality of parameters associated with the caller VR device, cause transmission of one of a plurality of media contents or a stitched media content from the caller VR device to the callee VR device after establishment of the VR call based on the determination.
- "16. The apparatus as claimed in claim 15, wherein the at least one processor configured to execute computer readable instructions to determine the callee VR device should perform the stitching operation associated with the VR call based on the first plurality of parameters associated with the callee VR device and the second plurality of parameters associated with the caller VR device.

"17. (canceled)

"18. (canceled)

- "19. The apparatus as claimed in claim 17, wherein the at least one processor configured to execute computer readable instructions to: receive a response indicative of acceptance of the stitching request from the callee VR device; and cause transmission of the plurality of media contents from the caller VR device to the callee VR device, such that the callee VR device is caused to perform, the stitching operation including stitching the plurality of media contents to form the stitched media content for rendering during the VR call.
- "20. The apparatus as claimed in claim 17, wherein the at least one processor configured to execute computer readable instructions to: receive a response indicative of rejection of the stitching request from the callee VR device; cause the caller VR device to perform the stitching operation is performed, the stitching operation including stitching the plurality of media contents to form the stitched media content; and cause transmission of the stitched media content from the caller VR device to the callee VR device for rendering during the VR call.
- "21. The apparatus as claimed in claim 15, wherein the at least one processor configured to execute computer readable instructions to determine the caller VR device should perform the stitching operation associated with the VR call based on the first plurality of parameters associated with the callee VR device and the second plurality of parameters associated with the caller VR device.

"22. (canceled)

"23. (canceled)

"24. The apparatus as claimed in claim 15, wherein the at least one processor configured to execute computer readable instructions to, receive a notification from the callee VR device during the VR call, the notification indicative of a region of interest corresponding to one of the plurality of media contents or the stitched media content, identify a current view point of the caller VR device, adjust the current view point of the caller VR device towards the region of interest to establish an adjusted view point, and cause transmission of one a plurality of adjusted media contents or a stitched adjusted media content as viewed from the adjusted view point from the caller VR device to the callee VR device for rendering during the VR call.

"25. (canceled)

"26. (canceled)

"27. (canceled)"

URL and more information on this patent application, see: CHEBOLU, Praveen; SANTHEBENUR VASUDEVAMURTHY, Varun Bharadwaj; CHINTHALAPUDI, Srinivas; VRIND, Tushar; BHAN, Abhishek; RAJAN, Nila. Apparatuses And Methods For Establishing Virtual Reality (Vr) Call Between Caller Vr Device And Callee Vr Device. Filed November 4, 2019 and posted February 18, 2021. Patent URL: http://appft.uspto.gov/netacgi/nph-

Parser?Sect1=PTO1&Sect2=HITOFF&d=PG01&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.html&r=1&f=G& l=50&s1=%2220210049821%22.PGNR.&OS=DN/20210049821&RS=DN/20210049821

Keywords for this news article include: Business, Electronics Companies, Samsung Electronics Co. Ltd.

Our reports deliver fact-based news of research and discoveries from around the world. Copyright 2021, NewsRx LLC

Document ELECWK0020210309eh3900002

Samsung Reveals First AMD FreeSync Premium Pro TVs, Mini LED Gaming Monitors

Scharon Harding
605 words
2 March 2021
Tom's Hardware
TOMHA
English
© 2021. Future US Inc. All Rights Reserved.

Samsung announced TVs with AMD's most advanced FreeSync, as well as a mini LED version of the Odyssey G9 monitor.

Samsung's 2021 The Frame TV has AMD FreeSync Premium Pro. (Image credit: Samsung)

Samsung just leveled the playing field a bit in the battle between TVs and gaming monitors. PC monitors have long held an advantage over TVs for gaming, largely due to speedier refresh rates and response times. The best-gaming-monitors also fight screen tearing with some flavor of Adaptive-Sync. TVs, meanwhile, have made advanced display technologies, like OLED and mini LED, more attainable. Today, Samsung threw bones toward both corners, announcing the first TV with AMD's most advanced screen tearing fighting technology and the marriage of its "Quantum Mini LED" technology and <a href="mainto-sample.com/sample.co

Samsung's Q70A TV has AMD FreeSync Premium Pro. (Image credit: Samsung)

During its <u>Unbox and Discover</u> event today, Samsung debuted the first TVs to include AMD <u>FreeSync</u>Premium Pro, which will work with both PCs and gaming consoles, like the new <u>PlayStation 5</u> and <u>Xbox Series X</u>. FreeSync Premium Pro will be available on Samsung's <u>4K</u> resolution <u>Q70A</u> and up, as well as the 2021 version of its customizable TV, aptly named <u>The Frame</u>.

There are numerous <u>TVs</u> available from Samsung, as well as from LG, with FreeSync Premium, which calls for a minimum 120 Hz refresh rate and adds low framerate compensation (LFC) compared to standard FreeSync. FreeSync Premium Pro takes things a step further by also supporting <u>HDR</u>content.

The vendor's also throwing in a new Game Bar, which helps gamers monitor "critical aspects of play," according to today's announcement, and use Samsung's Super Ultrawide Gameview feature, enabling ultrawide aspect ratios more commonly found in PC monitors than TVs.

Samsung Odyssey G9 at CES 2020 (Image credit: Tom's Hardware)

But the electronics giant also had news to share with gamers committed to PC monitors, however. The Samsung Odyssey G9 needed no help being extreme. With a 1000R curve, it's already as curvy as gaming monitors get today. However, Samsung upped the premium ante today by unveiling the 2021 version of the monitor with Quantum Mini LEDs. The 2020 version uses QLED, which is just another type of LEDs invented by Samsung for improved brightness and color.

Quantum Mini LEDs are already available in Samsung TVs, but the 2021 Odyssey G9 will mark one of the first mini LED gaming monitors, if not the first (depending on when it's actually available to buy.).

According to <u>Samsung</u>, its Quantum Mini LEDs are 1/40th the height of a standard LED (what you'll find in the vast majority of gaming monitors). Additionally, "instead of using a lens to disperse light and a package to fix the LED in place, [a] Quantum Mini LED has incredibly thin microlayers filled with many more LEDs." Samsung's Quantum Matrix Technology is supposed to enable precise control over those tiny LEDs to help fight blooming, also known as the halo effect. This would be particularly impressive, as even premium gaming monitors with FALDbacklights can fall victim to the halo effect.

We already saw what the power of mini LEDs could do for image quality, particularly contrast, in our review of the <u>Asus ProArt PA32UCX</u>, a monitor for professionals. But we've yet to see the technology in a PC monitor built for gaming. <u>Asus</u>and <u>Acer</u>have both promised to release their own mini LED gaming monitors, but that hasn't happened yet.

samsung the frame tv (Samsung)

Document TOMHA00020210302eh32000b9

Shopping; LikeFollow

One of Samsung's huge curved gaming monitors is almost \$500 off

Leah Stodart 290 words 23 February 2021 Mashable.com MASHABLE English

Copyright 2021, Mashable, Inc. All Rights Reserved. Distributed by NewsBank Inc.

Save \$470.99: Samsung's 49-inch QHD curved CRG9 gaming monitor is on sale for \$1,029 as of Feb. 23. That's a 31% discount and just around \$30 more than its lowest price ever.

Samsung Week on Amazon continues with a deadly discount on one of the most ambitious gaming monitors in recent history: the CRG9. This 49-inch gaming monitor is the equivalent of two 27-inch monitors pushed together, curved around your peripherals to provide something like a personal IMAX experience. Originally retailing at \$1,499.99, an almost \$500 price drop has it down to \$1,029 — over 30% in savings and just around \$30 more than its lowest price ever on Amazon.

The CRG9 might be ridiculously big. Sure. But for people who spend a ridiculous amount of time on their computer, it's an easy purchase to rationalize. (Make sure your desk is at least four feet long.) Hours of boring work presentations straight into a Sea of Thieves night will be so sick splashed across the 5,120 x 1,440 resolution, plus HDR 1000 and beautiful 125% sRGB coverage. The display is technically QHD, but this monitor is rocking a Samsung QLED panel.

A 120 Hz refresh rate and 4ms response time are certainly respectable specs, and most games will feel super responsive — if they support the 32:9 aspect ratio, that is.

Save \$470.99 at Amazon See Details

Explore related content:

*

10 of the best computer monitors for working, gaming, and everything in between

*

These are the best Python courses and bootcamps for wannabe programmers

*

How to connect your laptop to a monitor

Document MASHABLE20210224eh2n0000g



Mobiles

#FullOnSpeedy Gaming Performance With New Samsung Galaxy F62 and Its Flagship Processor

Sponsored Content 929 words 23 February 2021 18:30 NDTV NDTVIN English

Copyright. 2021. NDTV Convergence Ltd., New Delhi, India.

When was the last time you really felt bored? With a smartphone in your pocket, there's no dull moment anymore. But can your smartphone run all the major mobile games out there? Does it slow down while playing a few popular games? If the answer is yes, read on.

Samsung understands the importance of a value-for-money device for today's generation of smartphone users, its Gen-Z and millennial consumers. The company amazed us all with its first Galaxy F series phone lastyear, and it's doing it once again with the #FullOnSpeedy Samsung Galaxy F62, powered by the flagship 7nm Exynos 9825 chipset and a massive 7,000mAh battery.

Samsung Galaxy F62 is a great smartphone for youngsters who spend a lot of their time playing mobile games. The smartphone is powerful enough to handle all your favoritemobile games, and comes with an array of other exciting features that further add more value for Generation Z.

Let's take a look at some of the biggest features that make the Galaxy F62 a #FullOnSpeedy phone for gaming enthusiasts:

The Flagship 7nm Exynos 9825 Processor

For any smartphone to handle gaming, it needs the right combination of processor, GPU, memory, and software-based optimizations. The Galaxy F62 ticks all those boxes quiteeasily.

The phone is powered by the flagship 7nm Exynos 9825 processor which offers best-in-class segment scores. The chipset has managed to score 4,520,065 on ANTUTU 8, 2,401on Geekbench 5, and 68 on GFXBench 5. Those are some impressive numbers for smartphones in the sub-Rs.25,000 segment.

On the software front, Samsung Galaxy F62 is powered by Android 11-based One UI 3.1 interface. The slick interface is cleaner, and more fluid than ever. Firing up your favoritegames is quicker, faster, and much easier. Multitasking is an absolute breeze.

Powerful Mali G76 GPU with Game Booster

Samsung Galaxy F62 includes the powerful Mali G76 GPU with Game Booster to enhance your overall gaming experience. If you want to look at numbers, Samsung F62's flagship 7nm Exynos 9825 processor has scored452065 on ANTUTU 8 tests.

This means you can play just about any mobile game on-the-go. Samsung Galaxy F62 offers the perfect environment to run all the resource-intensive games you can think of, withoutworrying about anything slowing you down. The phone is an absolute delight when it comes to gaming.

#FullOnSpeedy Energy With Industry Leading 7,000mAh Battery

If the flagship processor unlocks an amazing platform for gaming, the massive 7,000mAh battery inside the Galaxy F62 provides for the ultimate non-stop gaming experience. The ultra-powerful battery is not just big on capacity, but on features too. It supports reverse charging, which means you can charge your other devices. The phone comes with a 25W USB Type-C fast charger in-the-box so that you can quickly charge the phone's battery.

A Large, Beautiful and immersive Display to Enhance Your Gaming Experience

To further enhance your gaming experience, the Samsung Galaxy F62 packs a large 6.7-inch FHD+ sAMOLED+ Infinity-O display. The large display is perfect for playing your favouritemobile games endlessly.

The display offers a peak brightness of 420 nits, which means you can enjoy playing games while you're out in the sun. It also features a contrast ratio of1000000:1, and an aspect ratio of 20:9.

An impressive 64MP Quad Camera set up with Single Take feature

By now, you're probably wondering what the Galaxy F62 bring in terms of cameras. Samsung's Galaxy F62 comes with a 64-megapixel quad rear camera setup and a 32-megapixel front-facing camera. Other cameras include a 5-megapixel macro camera, a 12-megapixel ultra-wide camera, and a 5-megapixel depth sensor.

The camera supports Samsung's Single Take feature, mostly found on more expensive Galaxy phones. The feature lets you capture 14 unique outputs including static outputs such as Best Moments, Filter, Smart Crop and Live focus and video outputs such as original video, boomerang, hyper-lapse and fast forward in one take

That's not all, Samsung Galaxy F62 comes in a sleek 9.5mm build, featuring 3 unique Laser Gradient designs in green, grey, and blue colours. Samsung Galaxy F62 also packsa fast Face Unlock, side fingerprint sensor, and defence-grade Knox security, Samsung's in-house security platform and a first in F Series and Samsung Pay offering a super simple and secure payment.

An Affordable Price Point and Loaded With Offers Too

This made-in-India smartphone is the first phone with a 7,000mAh battery on Flipkart right now. You can grab one for as little as Rs. 23,999 with an instant cashback of Rs.2,500 with ICIC Bank cards and EMI payments. The phone is now available on both Flipkart and Samsung's online store. You can buy it offline at Reliance Digital stores as well.

With Flipkart's Smart Upgrade Program, you can grab at the Samsung Galaxy F62 for as low as 70 percent of the actual price. After using the phone for a year, you can pay theremaining amount and keep the phone, or upgrade to the latest Galaxy series smartphone

So what are you waiting for? Head to Flipkart and Samsung right now, and grab the brand new Samsung Galaxy F62, and enjoy playing all your favourite mobile games without worrying about anything slowing you down.

Document NDTVIN0020210224eh2n0000h



Samsung Display Co. Ltd. "Display Apparatus And Virtual Reality Display System Having The Same" in Patent Application Approval Process (USPTO 20210035531)

3,126 words
23 February 2021
Information Technology Newsweekly
INTEWK
8177
English

© Copyright 2021 Information Technology Newsweekly via VerticalNews.com

2021 FEB 23 (VerticalNews) -- By a News Reporter-Staff News Editor at Information Technology Newsweekly -- A patent application by the inventors GU, Bon-Seog (Suwon-si, KR); KIM, Hong Soo (Hwaseong-si, KR); BAE, Woomi (Daegu, KR); PARK, Sangho (Hwaseong-si, KR), filed on July 2, 2020, was made available online on February 4, 2021, according to news reporting originating from Washington, D.C., by VerticalNews correspondents.

This patent application is assigned to Samsung Display Co. Ltd. (Yongin-Si, South Korea).

The following quote was obtained by the news editors from the background information supplied by the inventors: "The present disclosure relates to a display apparatus and a virtual reality display system including the display apparatus. More particularly, the present disclosure relates to a display apparatus reducing a dizziness of a user generated due to a delay of an image and a virtual reality display system including the display apparatus.

"Recently, as consumers' demand for virtual reality increases, many manufacturers have been developing a display system which enables a user to experience the virtual reality (e.g., an HMD system, a VR system, etc). Generally, the viewer wears a glasses-like display system and watches an image displayed by a display device included in the glasses-like display system to experience the virtual reality. Here, the display device included in the glasses-like display system is required to display the image with respect to (or, around) a user's gaze (or, line of sight). In other words, the display device included in the glasses-like display system is required to display an image which reflects the user's gaze. Thus, in a conventional display system, a gaze detecting sensor generates a gate detection signal by detecting the user's gaze, a processing unit (e.g., a central processing unit (CPU), an application processor (AP), etc) generates user's gaze data based on the gaze detection signal, a graphic processing unit (GPU) generates (or, performs rendering) image data which reflects the user's gaze based on the user's gaze data, and a display device receives the image data from the graphic processing unit to display an image which reflects the user's gaze. Furthermore, in the conventional display system, after the user's gaze is changed, the image data is generated by reflecting the changed user's gaze. Thus, a specific delay (i.e., latency) due to image data rendering may occur between a time point at which the user's gaze is changed and a time point at which the image which reflects the changed user's gaze is displayed. As a result, the user may feel dizziness due to the delay when experiencing the virtual reality. For example, because the delay due to the image data rendering, which corresponds to at least one image frame, occurs between the time point at which the user's gaze is changed and the time point at which the image which reflects the changed user's gaze is displayed in the conventional display system, a delay corresponding to at least 16.6 milliseconds (ms) may occur when a display device included in the conventional display system operates at 60 hertz (Hz)."

In addition to the background information obtained for this patent application, VerticalNews journalists also obtained the inventors' summary information for this patent application: "The present disclosure provides a display apparatus including a head tracker obtaining information of movement of a user and formed on a display substrate and generating a temporary image using the information of the movement of the user.

"The present disclosure also provides a virtual reality display system including the above-mentioned display apparatus.

"In an example embodiment of a display apparatus according to the present disclosure, the display apparatus includes a head tracker, a driving controller, and a display panel. The head tracker is configured to output information of movement of a user to the driving controller. The driving controller is configured to generate a temporary image based on the information of the movement of the user. The display panel is configured to selectively display an input image and the temporary image.

"In an example embodiment, the driving controller may include a temporary image generator configured to generate the temporary image based on previous frame data of the input image and the information of the Page 56 of 62 © 2022 Factiva, Inc. All rights reserved.

movement of the user and a comparator configured to output the input image when a coordinate of the input image representing a pointing direction of the input image is equal to a coordinate of the temporary image representing a pointing direction of the temporary image, and configured to output the temporary image when the coordinate of the input image is different from the coordinate of the temporary image.

"In an example embodiment, the information of the movement of the user may include a viewpoint coordinate of the user.

"In an example embodiment, the temporary image may include a viewpoint image corresponding to the viewpoint coordinate of the user in the previous frame data of the input image and at least one extended image which is generated by extending from at least one edge portion of the viewpoint image in a lateral direction.

"In an example embodiment, the information of the movement of the user may further include an acceleration of a head of the user.

"In an example embodiment, when the acceleration of the head of the user increases, a width of the viewpoint image of the temporary image may be set to decrease. When the acceleration of the head of the user decreases, the width of the viewpoint image of the temporary image may be set to increase.

"In an example embodiment, the head tracker and the driving controller may be disposed on a front surface of a display substrate where a display region of the display panel is formed.

"In an example embodiment, the driving controller may be disposed on a front surface of a display substrate where a display region of the display panel is formed. The head tracker may be disposed on a rear surface of the display substrate where the display region of the display panel is not formed.

"In an example embodiment, the head tracker may overlap the display region of the display panel.

"In an example embodiment, the head tracker and the driving controller may be disposed on a rear surface of a display substrate where a display region of the display panel is not formed.

"In an example embodiment, at least one of the head tracker and the driving controller may overlap the display region of the display panel.

"In an example embodiment, the display apparatus may further include a data driver configured to convert the input image into a input image data voltage and convert the temporary image into a temporary image data voltage. The driving controller and the data driver may be integrally formed to form an integrated data driver. The head tracker and the integrated data driver may be disposed on a front surface of a display substrate where a display region of the display panel is formed.

"In an example embodiment, the display apparatus may further include a data driver configured to convert the input image into a input image data voltage and convert the temporary image into a temporary image data voltage. The driving controller and the data driver may be integrally formed to form an integrated data driver. The integrated data driver may be disposed on a front surface of a display substrate where a display region of the display panel is formed. The head tracker may be disposed on a rear surface of the display substrate where the display region of the display panel is not formed.

"In an example embodiment, the head tracker may overlap the display region of the display panel.

"In an example embodiment, the display apparatus may further include a data driver configured to convert the input image into a input image data voltage and convert the temporary image into a temporary image data voltage. The driving controller and the data driver may be integrally formed to form an integrated data driver. The head tracker and the integrated data driver may be disposed on a rear surface of a display substrate where a display region of the display panel is not formed.

"In an example embodiment, at least one of the head tracker and the integrated data driver may overlap the display region of the display panel.

"In an exemplary embodiment, the display apparatus may further include a host configured to output the input image to the driving controller. The head tracker may be configured to output the information of the movement of the user to the host. The host may be configured to generate the input image based on the information of the movement of the user.

"In an example embodiment of a virtual reality display system according to the present disclosure, the virtual reality display system includes a lens unit, a display apparatus, and a housing. The display apparatus is disposed adjacent to the lens unit. The display apparatus includes a head tracker configured to output information of movement of a user to a driving controller, the driving controller configured to generate a

temporary image based on the information of the movement of the user, and a display panel configured to selectively display an input image and the temporary image. The housing is configured to receive the lens unit and the display apparatus.

"In an example embodiment, the driving controller may include a temporary image generator configured to generate the temporary image based on previous frame data of the input image and the information of the movement of the user and a comparator configured to output the input image when a coordinate of the input image representing a pointing direction of the input image is equal to a coordinate of the temporary image representing a pointing direction of the temporary image, and configured to output the temporary image when the coordinate of the input image is different from the coordinate of the temporary image.

"In an example embodiment, the information of the movement of the user may include a viewpoint coordinate of the user. The temporary image may include a viewpoint image corresponding to the viewpoint coordinate of the user in the previous frame data of the input image and at least one extended image which is generated by extending from at least one edge portion of the viewpoint image in a lateral direction.

"According to the display apparatus and the virtual reality display system including the display apparatus, the head tracker determining the information of the movement of the user may be formed on the display substrate. The driving controller of the display apparatus may generate the temporary image based on the information of the movement of the user and may output the temporary image to the display panel until the new input image to which the information of the movement of the user is reflected is received from the host.

"Thus, the dizziness of the user generated due to the delay of the image may be reduced in the virtual reality display system."

The claims supplied by the inventors are:

- "1. A display apparatus comprising: a head tracker configured to output information of movement of a user to a driving controller; the driving controller configured to generate a temporary image based on the information of the movement of the user; and a display panel configured to selectively display an input image and the temporary image.
- "2. The display apparatus of claim 1, wherein the driving controller comprises: a temporary image generator configured to generate the temporary image based on previous frame data of the input image and the information of the movement of the user; and a comparator configured to output the input image when a coordinate of the input image representing a pointing direction of the input image is equal to a coordinate of the temporary image representing a pointing direction of the temporary image, and configured to output the temporary image when the coordinate of the input image is different from the coordinate of the temporary image.
- "3. The display apparatus of claim 2, wherein the information of the movement of the user includes a viewpoint coordinate of the user.
- "4. The display apparatus of claim 3, wherein the temporary image includes a viewpoint image corresponding to the viewpoint coordinate of the user in the previous frame data of the input image and at least one extended image which is generated by extending from at least one edge portion of the viewpoint image in a lateral direction.
- "5. The display apparatus of claim 4, wherein the information of the movement of the user further includes an acceleration of a head of the user.
- "6. The display apparatus of claim 5, wherein when the acceleration of the head of the user increases, a width of the viewpoint image of the temporary image is set to decrease, and wherein when the acceleration of the head of the user decreases, the width of the viewpoint image of the temporary image is set to increase.
- "7. The display apparatus of claim 1, wherein the head tracker and the driving controller are disposed on a front surface of a display substrate where a display region of the display panel is formed.
- "8. The display apparatus of claim 1, wherein the driving controller is disposed on a front surface of a display substrate where a display region of the display panel is formed, and wherein the head tracker is disposed on a rear surface of the display substrate where the display region of the display panel is not formed.
- "9. The display apparatus of claim 8, wherein the head tracker overlaps the display region of the display panel.
- "10. The display apparatus of claim 1, wherein the head tracker and the driving controller are disposed on a rear surface of a display substrate where a display region of the display panel is not formed.

- "11. The display apparatus of claim 10, wherein at least one of the head tracker and the driving controller overlaps the display region of the display panel.
- "12. The display apparatus of claim 1, further comprising a data driver configured to convert the input image into a input image data voltage and convert the temporary image into a temporary image data voltage, wherein the driving controller and the data driver are integrally formed to form an integrated data driver, and wherein the head tracker and the integrated data driver are disposed on a front surface of a display substrate where a display region of the display panel is formed.
- "13. The display apparatus of claim 1, further comprising a data driver configured to convert the input image into a input image data voltage and convert the temporary image into a temporary image data voltage, wherein the driving controller and the data driver are integrally formed to form an integrated data driver, wherein the integrated data driver is disposed on a front surface of a display substrate where a display region of the display panel is formed, and wherein the head tracker is disposed on a rear surface of the display substrate where the display region of the display panel is not formed.
- "14. The display apparatus of claim 13, wherein the head tracker overlaps the display region of the display panel.
- "15. The display apparatus of claim 1, further comprising a data driver configured to convert the input image into a input image data voltage and convert the temporary image into a temporary image data voltage, wherein the driving controller and the data driver are integrally formed to form an integrated data driver, wherein the head tracker and the integrated data driver are disposed on a rear surface of a display substrate where a display region of the display panel is not formed.
- "16. The display apparatus of claim 15, wherein at least one of the head tracker and the integrated data driver overlaps the display region of the display panel.
- "17. The display apparatus of claim 1, further comprising a host configured to output the input image to the driving controller, wherein the head tracker is configured to output the information of the movement of the user to the host, and wherein the host is configured to generate the input image based on the information of the movement of the user.
- "18. A virtual reality display system comprising: a lens unit; a display apparatus disposed adjacent to the lens unit, the display apparatus comprising a head tracker configured to output information of movement of a user to a driving controller; the driving controller configured to generate a temporary image based on the information of the movement of the user; a display panel configured to selectively display an input image and the temporary image; and a housing configured to receive the lens unit and the display apparatus.
- "19. The virtual reality display system of claim 18, wherein the driving controller comprises: a temporary image generator configured to generate the temporary image based on previous frame data of the input image and the information of the movement of the user; and a comparator configured to output the input image when a coordinate of the input image representing a pointing direction of the input image is equal to a coordinate of the temporary image representing a pointing direction of the temporary image and configured to output the temporary image when the coordinate of the input image is different from the coordinate of the temporary image.
- "20. The virtual reality display system of claim 19, wherein the information of the movement of the user includes a viewpoint coordinate of the user, and wherein the temporary image includes a viewpoint image corresponding to the viewpoint coordinate of the user in the previous frame data of the input image and at least one extended image which is generated by extending from at least one edge portion of the viewpoint image in a lateral direction."

URL and more information on this patent application, see: GU, Bon-Seog; KIM, Hong Soo; BAE, Woomi; PARK, Sangho. Display Apparatus And Virtual Reality Display System Having The Same. Filed July 2, 2020 and posted February 4, 2021. Patent URL:

http://appft.uspto.gov/netacgi/nph-

Parser?Sect1=PTO1&Sect2=HITOFF&d=PG01&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.html&r=1&f=G& l=50&s1=%2220210035531%22.PGNR.&OS=DN/20210035531&RS=DN/20210035531

Keywords for this news article include: Business, Electronics Companies, Information Technology, Samsung Display Co. Ltd.

Our reports deliver fact-based news of research and discoveries from around the world. Copyright 2021, NewsRx LLC

Document INTEWK0020210223eh2n00014

Samsung Odyssey G9 Review: A mansion-class 49-inch gaming monitor

Geraint Evans
1,135 words
22 February 2021
T3
SMLIV
English
© 2021. Future Publishing Ltd. All Rights Reserved.

The Samsung Odyssey G9 offers the highest level ultra-wide gaming monitor experience

Welcome to T3's review of the Samsung Odyssey G9. One of the best gaming monitors around today, this absolutely massive, 49-inch curved monitor is really something to behold.

It isn't quite 4K, though you can check out our <u>best 4K monitors</u>, but it is so incredibly powerful as to not really matter. This is the monitor you pick up if you have the best of the best, <u>the best gaming mouse</u>, <u>best gaming headset</u>, <u>best gaming keyboard</u> and the <u>best gaming chair</u>.

It's hard to give a reasonable quick take on this 32:9, 240Hz beast of a gaming monitor. It has incredible specs, everything you would need or want in a gaming monitor. It's also striking and stylish, but I can't help but feel that for the vast majority of people the Samsung Odyssey G9 would be utterly impractical.

This is the sort of gaming monitor that I imagine sits at the heart of the highest spec gaming environment, in the middle of a mansion bought from Twitch donations.

Samsung Odyssey G9 Review: Design and Setup

The Samsung Odyssey G9's Infinity Core lighting system is very cool (Image credit: Future)

Setting up the Samsung Odyssey G9 is a little stressful. Not because it is particularly difficult, but because of its size, odd dimensions and weight. Its instructions came on a CD, which I cannot play – though, the YouTuber I followed to put it together had paper instructions included with theirs. So perhaps something went missing in the delivery of my model.

Attaching the feet to the stand is pretty simple, and adding the stand to the monitor itself required just a few screws, which were a little fiddly. Slotting the plastic ring around the 'Infinity Core' lighting system at the back is a little bit tricky. The main issue here is trying to move the Odyssey G9 afterwards – it is very heavy.

It can be wall mounted but at 16.7kg, I'm not sure I would feel entirely comfortable doing that with such an expensive piece of kit. I suppose it depends on how confident you are in your plasterboard.

Of course, once you've dealt with the anxiety of moving it into position, you have an absolutely stunning gaming monitor. The 1000R curved screen reaches almost to the full edges of its chassis across the top and sides, with a relatively thin bezel at the base of the screen displaying the Samsung logo. It is a full QLED wall of monitor.

The rear of this monitor looks like something out of science fiction. The Odyssey G9's glossy white, vented plastic accented by the glowing Infinity Core lighting system. It would fit easily into the aesthetic confines of Destiny's world, or perhaps the Institute of Fallout 4. It'll depend on your room/desk set up as to how much you'll actually get to enjoy that once the Odyssey G9 is up and running.

In terms of ports, the G9 features an HDMI 2.0, two DisplayPort connectors and two USB 3.0s and a USB hub version 3. It also comes with a headset jack, but there are no built-in speakers which does feel like a missed opportunity in such a large monitor.

Samsung Odyssey G9 Review: Features & Picture

There is something to be said for playing Grand Strategy on the ultra-wide Samsung Odyssey G9 (Image credit: Future)

If I'm being honest, I do not have the hardware to fully take advantage of what the Odyssey G9 can do. But then, few will. While the screen is not quite 4K, its 109ppi, 5120x1440 resolution and 240Hz refresh rate will require a serious gaming machine to fulfil its potential.

As the DisplayPort 1.4 and HDMI 2.0's can't actually handle the bandwidth required for the Odyssey's resolution/refresh rate combo you'll need a graphics card that supports DSC (Display Stream Compression),

Page 60 of 62 © 2022 Factiva, Inc. All rights reserved.

to get the most out of it. Even with the highest spec gaming PC, you'll be hard-pressed to rinse everything out of the G9.

Of course, that should future proof the Odyssey G9 for a good while yet. And it should be said that if you have that setup then it's hard to see how you could go wrong with Odyssey G9.

As you'd expect this gaming monitor is G-sync and FreeSync enabled, has an impressive 1ms response time and uses HDR1000 and HDR10+. These optimise darks, whites and overall brightness. It makes games come alive, offering vibrancy and depth. It should hit 97% DCI-P3 and 125% of the sRGB colour gamut. It is, at its best, the best ultra-wide gaming monitor on the market.

Its PBP (picture-by-picture) mode also deserves a shoutout, and should interest streamers, YouTube tutorial obsessives and anyone gaming with friends on video chat. This massive monitor can split down the middle to create, what is essentially two crisp and sharp 27-inch displays (you can also make one side slightly larger than the other).

Samsung Odyssey G9 Review: Price & Verdict

The Samsung Odyssey G9 is an all-round brilliant gaming monitor, as long as you have the space to keep it in (Image credit: Future)

While the widgets on this review will show the most up-to-date prices for the Samsung Odyssey G9, it is an expensive monitor. You should expect to pay over £1000/\$1400 for it. That is worth it for what you get. There is nothing on the market that offers what this monitor does, in this shape and size at least. The question is whether it's right for you.

Ultimately, having spent a week with the Odyssey G9 I won't be sad to see it go. That isn't because it's bad, but because it's simply too much monitor. Its size means I can't push it back further on my desk; this is fine if I'm sat back with a control pad, but using a keyboard and mouse I found myself having to turn it off on occasion because it's just too much for my eyes at this distance – even with eye saver mode permanently on.

It's a hard monitor to score. If you have the money, if you have the space and if you have the hardware to take advantage of it – the Samsung Odyssey G9 is the only monitor that you should buy. But for most people, I think this 49-inch beast is just a tad too impractical.

* Best SSDs to buy

Samsung Odyssey G9 review (Samsung)

Document SMLIV00020210222eh2m0008j

Search Summary

Text	(hd=samsung) and wc>100 and hd=(virtual real estate or virtual properties or digital real esate or digital real assets or digital properties or metaverse properties or digital plots or virtual plots or virtual land or virtual reality platform or manufacturing simulation or virtual simulation or digital twins or virtual manufacturing or immersive learning or mixed-reality learning or metaverse learning or VR learning or AR learning or VR training or virtual recruitment or 3d training or training metaverse or virtual retail or virtual shopping or virtual clienteling or omnichannel shopping or humanising digital retail or immersive virtual stores or 3d virtual store or metaverse shopping or virtual clothing or virtual goods or gaming or digital avatar or digital character or virtual game or 3D avatars or virtual reality or interoperable VR space or digital financial ecosystems or metaverse wallets or robo advisory or virtual financial data or digital bank branches or digital touchpoint or blockchain wallets or digital wallets or digital wedding or virtual wedding or virtual event or virtual concert or virtual theme park or virtual classroom or virtual learning or virtual school or immersive learning)
Date	In the last year
Source	All Sources
Author	All Authors
Company	All Companies
Subject	All Subjects
Industry	All Industries
Region	All Regions

Language	English
Results Found	409
Timestamp	21 February 2022 18:02