

ENT 610: Managing Innovation and IP for Entrepreneurs  
Assignment

**General Patent Landscape Analysis**

**Product:** Augmented reality glasses for near-eye vision

**Keywords/ synonyms:** Augmented/Mixed, Reality, Near Eye, Glass/Headset

**IPC codes:**

- G02B - Optical elements, systems, or apparatus
- G06T - Image data processing or generation

**Patentscope:**

Search strings in the order they were used and the number of results obtained

1. (Augmented **OR** Mixed) **near1** Reality - 29,118
2. (Augmented **OR** Mixed) **near1** Reality **near1** (glass\* **OR** headset\*) - 975
3. (Augmented **OR** Mixed) **near1** Reality **near1** (glass\* **OR** headset\*) **AND** (near\* **near2** eye\*) - 29

Most relevant patents:

1. WO/2021/010603  
Near-Eye Display Device, Augmented Reality Glasses Including Same, and Operating Method Therefor
2. 20210103149  
Augmented Reality Headset Including Viewing Direction Independent Single Layer, Pixelated Light Dimmer Filter
3. 206946103  
Modular Augmented Reality Glasses

4. 111175971

Near-to-Eye Optical Display Systems and Augmented Reality Glasses

5. 762677

Near Eye 3D Display with Separate Phase and Amplitude Modulators

Google Patents:

Search strings in the order they were used and the number of results obtained

1. (((AB=Augmented) **OR** (AB=Mixed)) (AB=Reality)) - 39,316
2. (((AB=Augmented) **OR** (AB=Mixed)) (AB=Reality **NEAR/1** (AB=Glass\*) **OR** (AB=Headset\*))) - 3,025
3. (((AB=Augmented) **OR** (AB=Mixed)) (AB=Reality **NEAR/1** (AB=Glass\*) **OR** (AB=Headset\*))(AB=Near\* **NEAR/2** AB=Eye\*)) - 41

Most relevant patents:

1. CN109343219A  
A Kind of Augmented Reality type Super Thin Plane Near Eye Display Based On Microstructure
2. CN109031669B  
Compact Holographic Near-to-Eye AR Display System and Application and Thereof
3. CN106489177A  
There Is The Near-to-Eye of Self Luminous Micro Display Engine
4. CN204855937U  
Head Mounted Display with Virtual Reality and Augmented Reality Function
5. CN105259656B  
Augmented Reality Glasses with Diopter Eye effect

## Espacenet:

Search strings in the order they were used and the number of results obtained

1. (ta = "Augmented" **OR** ta = "Mixed") **AND** ta = "Reality"  
- 14,890
2. (ta = "Augmented" **OR** ta = "Mixed") **AND** ta = "Reality" **AND**  
(ta=("Glass\*" **prox/distance<1** "Reality") OR ta = "Headset\*")  
- 767
3. (ta = "Augmented" **OR** ta = "Mixed") **AND** ta = "Reality" **AND**  
(ta=("Glass\*" **prox/distance<1** "Reality") **OR** ta = "Headset\*")  
**AND** ta = "Near\*" **AND** ta=("Eye\*" **prox/distance<2** "Near\*")  
- 24

Most relevant patents:

1. [WO2021010603A1](#)  
Near-Eye Display Device, Augmented Reality Glasses  
Including Same, and Operating Method Therefor
2. [CN206946103U](#)  
Modulated Augmented Glasses
3. [US11231581B2](#)  
Near Eye 3D Display with Separate Phase and  
Amplitude Modulators
4. [US11187907B2](#)  
Augmented Reality Headset Including Viewing  
Direction Independent Single-Layer, Pixelated Light  
Dimming Filter
5. [KR20210007818A](#)  
Near Eye Display Device Agreegated Reality Glasses  
and Method of its Operation

## Lens:

Search strings in the order they were used and the number of results obtained

1. abstract:(Augmented **OR** Mixed) **AND** abstract:Reality - 22,825
2. abstract:(Augmented **OR** Mixed) **AND** abstract: ("Reality glass\*"~1 **OR** "Reality headset\*"~1) - 281
3. abstract:(Augmented **OR** Mixed) **AND** abstract: ("Reality glass\*"~1 **OR** "Reality headset\*"~1) AND abstract: "near\* eye\*"~2 - 2

Most relevant patents<sup>1</sup>:

1. US 11187907 B2  
Augmented Reality Headset Including Viewing Direction Independent Single-Layer, Pixelated Light Dimming Filter
2. US 2021/0103149 A1  
Viewing Direction Independent Single-Layer, Pixelated Light Dimming Filter

## USPTO:

Search strings in the order they were used and the number of results obtained

1. abst/((augmented **or** mixed) **and** reality) - 4,396
2. abst/((augmented **or** mixed) **and** reality **and** (glass\$ **or** headset\$)) - 209
3. abst/((augmented **or** mixed) **and** reality **and** (glass\$ **or** headset\$) **and** near\$ **and** eye) - 2

Most relevant patents<sup>2</sup>:

1. 11,231,51  
Near Eye 3D Display with Seperate Phase and Amplitude Modulators

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<sup>1</sup> Only 2 patents were retrived

<sup>2</sup> Only 2 patents were retrived

2. 11,187,907

Augmented Reality Headset Including Viewing Direction  
Independent Single-Layer, Pixelated Light Dimming Filter

### Inpass:

Search strings in the order they were used and the number of  
results obtained

1. augmented **and** reality - 336
2. augmented and reality and glass - 13
3. augmented and reality and glass and near and eye - 1

Most relevant patents<sup>3</sup>:

1. 201921035562

A Real World Object Interaction Through Eyes: A Novel  
Augmented Reality Concept

Madan Y N  
200070040

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<sup>3</sup> Only 1 patent was retrieved