

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2023/0231844 A1

Jul. 20, 2023 (43) **Pub. Date:**

(54) DYNAMIC SECURE KEYBOARD RESOURCE **OBTAINING INTERFACE DEFINITIONS FOR** SECURE AD-HOC CONTROL OF A TARGET **DEVICE IN A SECURE PEER-TO-PEER DATA NETWORK**

(71) Applicant: WhiteStar Communications, Inc., Durham, NC (US)

BILLY GAYLE MOON, Apex, NC (72)Inventor:

Assignee: WhiteStar Communications, Inc., (73)Durham, NC (US)

Appl. No.: 17/580,365

(22)Filed: Jan. 20, 2022

Publication Classification

(51) Int. Cl. G06F 9/451 (2006.01)H04L 9/40 (2006.01)G06F 21/83 (2006.01) (52) U.S. Cl. CPC G06F 9/454 (2018.02); H04L 63/04 (2013.01); H04L 63/0815 (2013.01); G06F **21/83** (2013.01)

(57) ABSTRACT

A secure executable container executed by an endpoint device establishes a two-way trusted relationship in a secure peer-to-peer data network with a user entity, generates an endpoint identifier for the endpoint device in the secure peer-to-peer data network, and associates the endpoint device with a federation identifier identifying the user entity in the secure peer-to-peer data network. The secure executable container also: establishes a two-way trusted relationship between the endpoint device and a target network device; securely obtains, via the secure peer-to-peer data network, a user interface element definition describing a user interface element executable by the target network device; and supplies the user interface element definition to a secure keyboard resource executed in the endpoint device, causing the secure keyboard resource to generate a local representation of the user interface element for control of the target network device via the secure keyboard resource.

