Integrated Virtual Reality and Audiovisual Display Support System for Patients in a Prone Position

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ABSTRACT

Researchers at the University of California, Davis have developed an integrated virtual reality and audiovisual support system that increases the comfort of patients who are undergoing diagnostic tests or medical procedures in the prone and other positions.

FULL DESCRIPTION

Display systems such as virtual reality headsets have grown in popularity in recent years – in part because of their ability to allow users to experience a calming, immersive environment. Such devices are especially helpful to distract conscious patients undergoing extended diagnostic tests or medical procedures. However, the ancillary electronics related to these devices often require bulky or cumbersome systems that do not facilitate patient comfort or support. Additionally, a person undergoing such a procedure may be partially sedated or in a weakened state due to an illness or other medical condition - thereby further complicating the ability of that patient to use a head-mounted display. The use of such devices is especially limiting for procedures that require patients to maintain a prone position.

Researchers at the University of California Davis have developed a display device that allows for immersive audiovisual distraction for patients in prone positions. The system integrates an audiovisual virtual reality headset with supportive positioning equipment to provide head, torso, or other support to patients. The combination of the supportive equipment and the display increases patient comfort while reducing their anxiety.

APPLICATIONS

- Provides a comfortable, effective solution for prone medical procedures
- Integrates with a virtual reality audiovisual display to reduce patient anxiety

FEATURES/BENEFITS

- Provides superior comfort and safety compared to other currently available systems

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Published Application	20240065914	02/29/2024	2021-609

CONTACT

Pooja N. Bhayani
pnbhayani@ucdavis.edu
tel: .

INVENTORS

- Jung, Michael

OTHER INFORMATION

KEYWORDS

virtual reality, prone medical procedures, medical devices, audiovisual, prone diagnostic tests

CATEGORIZED AS

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Technology Transfer Office

1 Shields Avenue, Mrak Hall 4th Floor,

Davis,CA 95616

Tel:

530.754.8649

techtransfer@ucdavis.edu

https://research.ucdavis.edu/technology-transfer/

Fax:

530.754.7620