

A Discrete Color Approach for Stress Mitigation in Medical and Related Healthcare Applications as Applied to the Lighting Of Interiors and/or Medical Apparatus

Tech ID: 33124 / UC Case 2023-567-0

ABSTRACT

The California Lighting Technology Center at UC Davis in collaboration with the Center for Mind and Brain have developed a novel lighting technology approach for stress recovery and stress mitigation.

FULL DESCRIPTION

Researchers at the University of California, Davis California Lighting Technology Center in collaboration with the Center for Mind and Brain have developed a novel lighting technology approach for stress recovery and stress mitigation. This technology approach involves the use of discrete spectra that can be introduced to humans through either automated or user-based control system to assist in stress recovery in medical and health care environments. The research involves developing technologies that allow for the appropriate intervention inside medical and health care environments for stress mitigation with patients undergoing invasive, stressful health procedures. Examples of health care environments include imaging spaces for MRI and CT scanning, infusion spaces for chemotherapy, preop surgery clinics, and related medical environments. Additionally, there are possible consumer-grade lighting application opportunities in commercial and residential buildings for stress mitigation.

APPLICATIONS

- ▶ Healthcare facilities lighting systems including: MRI and CT scanning spaces, infusion spaces for chemotherapy, and preoperative surgery clinics
- ► Medical apparatus lighting systems

FEATURES/BENEFITS

- Possibility to reduced stress markers
- ▶ Possibility to produce positive brain wave patterns

PATENT STATUS

Patent Pending

OTHER INFORMATION

Affiliation: Vijayavel Ramachandran and Kristi Doherty are employees of Toyota Boshoku America.

CONTACT

Michael M. Mueller mmmueller@ucdavis.edu tel:



INVENTORS

- ▶ Doherty, Kristi
- ► Hostinar, Camelia
- ► Mangun, George
- Meyyappan,

Sreenivasan

▶ Ramachandran,

Vijayavel

- ➤ Siminovitch, Michael
- J.
- ▶ Suk, Jae

OTHER INFORMATION

KEYWORDS

light and stress
mitigation, lighting and
mood, lighting and stress

CATEGORIZED AS

Optics and

Photonics

► All Optics and Photonics

- Energy
 - Lighting
- Medical

▶ Other

RELATED CASES

2023-567-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- ▶ Power Line Phase Cut Signaling
- ► Simplified Daylight Harvesting

University of California, Davis

Technology Transfer Office

1 Shields Avenue, Mrak Hall 4th Floor,

Davis, CA 95616

Tel:

© 2023 - 2024, The Regents of the University of

530.754.8649

California

techtransfer@ucdavis.edu

Terms of use

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

Privacy Notice

transfer/

Fax:

530.754.7620