

Title (en)

APPARATUS, SYSTEM, AND METHOD FOR MITIGATING MOTION-TO-PHOTON LATENCY IN HEAD-MOUNTED DISPLAYS

Title (de)

VORRICHTUNG, SYSTEM UND VERFAHREN ZUR VERRINGERUNG DER BEWEGUNGS-ZU-PHOTONEN-LATENZ IN KOPFMONTIERTEN ANZEIGEN

Title (fr)

APPAREIL, SYSTÈME ET PROCÉDÉ D'ATTÉNUATION DE LA LATENCE ENTRE MOUVEMENT ET PHOTON DANS DES VISIOCASQUES

Publication

EP 3522150 A2 20190807 (EN)

Application

EP 18187455 A 20180806

Priority

- US 201862626004 P 20180203
- US 201816006434 A 20180612
- US 2018038224 W 20180619

Abstract (en)

A special-purpose hardware device for mitigating motion-to-photon latency in head-mounted displays may include an image signal processor that receives at least one image frame (402) captured by a camera device of a head-mounted-display system. The special-purpose hardware device may also include an input-formatting component that receives the computer-generated imagery. (404) The special-purpose hardware device may further include a blending component (106) that generates at least one mixed-reality frame by overlaying the computer-generated imagery onto the image frame. The special-purpose hardware device may additionally include a frame-output interface that feeds the mixed-reality frame generated by the blending component to a display device (318) of the head-mounted-display system to facilitate displaying the mixed-reality frame for presentation to a user wearing the head-mounted-display system.

IPC 8 full level

G09G 5/397 (2006.01); **G02B 27/01** (2006.01)

CPC (source: EP)

G09G 5/12 (2013.01); **G09G 5/397** (2013.01); **G09G 2320/0242** (2013.01); **G09G 2320/0252** (2013.01); **G09G 2340/12** (2013.01)

Cited by

US11455705B2; US10803826B2; WO2020068406A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3522150 A2 20190807; EP 3522150 A3 20200101

DOCDB simple family (application)

EP 18187455 A 20180806