

Title (en)

HEAD-UP DISPLAY FOR MOTOR VEHICLE AND ASSISTED-DRIVING SYSTEM INCLUDING SUCH A DISPLAY

Title (de)

HEADUP-ANZEIGE FÜR EIN KRAFTFAHRZEUG UND FAHRASSISTENZSYSTEM MIT EINER SOLCHEN ANZEIGE

Title (fr)

AFFICHEUR TETE-HAUTE POUR VEHICULE AUTOMOBILE ET SYSTEME D'AIDE A LA CONDUITE COMPORTANT UN TEL AFFICHEUR

Publication

EP 3740810 A1 20201125 (FR)

Application

EP 19704728 A 20190117

Priority

- FR 1850380 A 20180117
- EP 2019051186 W 20190117

Abstract (en)

[origin: WO2019141788A1] The invention relates to a head-up display (10) for a motor vehicle (3), including a first image-generating unit (11) comprising a first laser scanner (13, 14, 15) having a laser diode emitting at a first wavelength (λ_1), this first unit being controlled by a computer (30) to generate first images (Img1); a second image-generating unit (12) controlled by the computer to generate second images (Img2), this second unit being suitable for generating a light beam in a band of wavelengths ($\Delta\lambda$) comprising a second wavelength (λ_4); and an optical assembly (18) for projecting images, suitable for projecting the first and second images into the field of view of a driver (2) and including a spectrally selective optical filter (19) suitable for reflecting light at the first wavelength and for transmitting light in a major portion of the band of wavelengths. According to the invention, the first and second units are placed on either side of the optical filter so that the first and second images are formed in a first image plane (P1) and in a second image plane (P2), respectively, and the computer controlling the first unit is configured to process a set of data relative to the environment facing the vehicle so as to superimpose a first image with at least one specific object of said environment.

IPC 8 full level

G02B 27/01 (2006.01)

CPC (source: EP)

B60W 50/14 (2013.01); **G02B 27/0101** (2013.01); **B60W 2050/146** (2013.01); **B60W 2420/408** (2024.01); **G02B 2027/0112** (2013.01); **G02B 2027/0114** (2013.01); **G02B 2027/0127** (2013.01); **G02B 2027/0138** (2013.01); **G02B 2027/014** (2013.01); **G02B 2027/0141** (2013.01)

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)

FR 3076913 A1 20190719; **FR 3076913 B1 20210409**; EP 3740810 A1 20201125; WO 2019141788 A1 20190725

DOCDB simple family (application)

FR 1850380 A 20180117; EP 19704728 A 20190117; EP 2019051186 W 20190117