

Title (en)

IMAGE PROCESSING METHOD FOR A DRIVER ASSISTANCE SYSTEM IN A MOTOR VEHICLE FOR DETECTING AND CLASSIFYING AT LEAST ONE PORTION OF AT LEAST ONE PRESCRIBED IMAGE ELEMENT

Title (de)

BILDVERARBEITUNGSVERFAHREN FÜR EIN FAHRERASSISTENZSYSTEM EINES KRAFTFAHRZEUGS ZUR DETEKTION UND KLASSIFIKATION WENIGSTENS EINES TEILS WENIGSTENS EINES VORGEGEBENEN BILDELEMENTS

Title (fr)

PROCÉDÉ DE TRAITEMENT D'IMAGE POUR SYSTÈME D'AIDE À LA CONDUITE D'UN VÉHICULE À MOTEUR, POUR LA DÉTECTION ET LA CLASSIFICATION D'AU MOINS UNE PARTIE D'AU MOINS UN ÉLÉMENT D'IMAGE PRÉDÉTERMINÉ

Publication

**EP 2449507 A1 20120509 (DE)**

Application

**EP 10726950 A 20100621**

Priority

- EP 2010058688 W 20100621
- DE 102009027275 A 20090629

Abstract (en)

[origin: WO2011000726A1] The invention relates to an image processing method for a driver assistance system (10) in a motor vehicle (11) for detecting and classifying at least one portion of at least one prescribed image element, which has a road sign or portions of a road sign, in at least one digital image which is to be searched and which is captured by an image sensor (12) in the driver assistance system (10). In order to detect and classify the at least one portion of the at least one prescribed image element in the at least one digital image (16) which is to be searched, first scale-invariant image features and the relative arrangement thereof with respect to one another are calculated from at least one image region of the at least one digital image which is to be searched, after which the first scale-invariant image features and the relative geometric arrangement thereof with respect to one another are compared by a classifier with stored and/or learnt second scale-invariant image features, calculated from the at least one prescribed image element, and the relative geometric arrangement thereof with respect to one another, wherein the result of the comparison is that, if there is an adequate match, the at least one portion of the at least one prescribed image element is detected and classified in the at least one digital image which is to be searched.

IPC 8 full level

**G06V 10/771** (2022.01)

CPC (source: EP US)

**G06F 18/211** (2023.01 - EP US); **G06V 10/771** (2022.01 - EP US); **G06V 20/582** (2022.01 - EP US)

Citation (search report)

See references of WO 2011000726A1

Cited by

CN104021369A

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 SE SI SK SM TR

DOCDB simple family (publication)

**DE 102009027275 A1 20101230**; CN 102549602 A 20120704; EP 2449507 A1 20120509; JP 2012531685 A 20121210; US 2012162429 A1 20120628; US 9030558 B2 20150512; WO 2011000726 A1 201110106

DOCDB simple family (application)

**DE 102009027275 A 20090629**; CN 201080029239 A 20100621; EP 10726950 A 20100621; EP 2010058688 W 20100621; JP 2012518066 A 20100621; US 201013380764 A 20100621