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Declarations under Rule 4.17:

- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR WEATHER CONDITION DETECTION WITH IMAGE-BASED ROAD CHARACTERIZATION

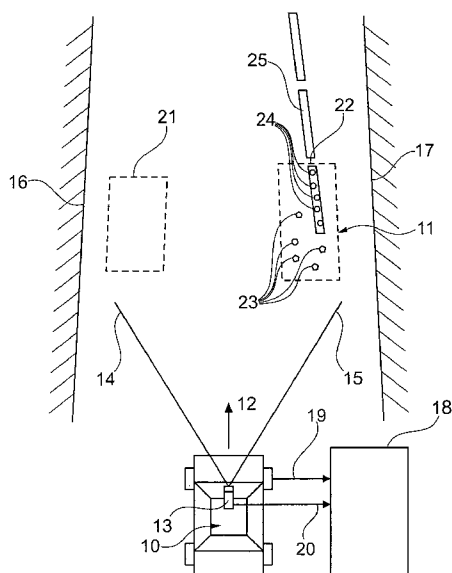


Fig. 2

(57) Abstract: The present invention relates to video-based driver assistance systems being used in vehicles today to perform a variety of functions, such as lane or road departure warning. These functions often require that parts of the video image be identified as, for example, a traffic sign, a bridge, lane markings, etc. Particularly the present invention relates to a method for video image-based weather and/or road condition detection. A method and a system is described, according to which method, weather and/or conditions are detected by identifying bright pixels or groups of bright pixels in video images and by deciding whether or not said bright pixels are caused by reflections, due to rain or snowfall, and/or due to a wet or snowy surface. Also a computer program product is described, stored on a computer usable medium comprising computer readable program means for causing a computer to perform such a method, wherein said computer program product is executed on a computer.

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# INTERNATIONAL SEARCH REPORT

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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> INV. G06T7/40 ADD. G01W1/14		
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
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<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 10 2005 044486 A1 (DAIMLER CHRYSLER AG [DE]) 29 March 2007 (2007-03-29) abstract; figures 1-9 paragraph [0002] - paragraph [0026] paragraph [0038] - paragraph [0067]	1-16
A	KURIHARA H ET AL: "Rainy weather recognition from in-vehicle camera images for driver assistance" INTELLIGENT VEHICLES SYMPOSIUM, 2005. PROCEEDINGS. IEEE LAS VEGAS, NV, USA JUNE 6-8, 2005, PISCATAWAY, NJ, USA, IEEE, PISCATAWAY, NJ, USA, 6 June 2005 (2005-06-06), pages 205-210, XP010833968 ISBN: 978-0-7803-8961-8 the whole document	1-16
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <span style="margin-left: 200px;"><input checked="" type="checkbox"/> See patent family annex.</span>		
* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed		
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family		
Date of the actual completion of the international search	Date of mailing of the international search report	
<b>9 March 2010</b>	<b>24/03/2010</b>	
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  <b>Herter, Jochen</b>	

## INTERNATIONAL SEARCH REPORT

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>MUNEO YAMADA ET AL: "Discrimination of the Road Condition Toward Understanding of Vehicle Driving Environments"            IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, IEEE SERVICE CENTER, PISCATAWAY, NJ, US,            vol. 2, no. 1, 1 March 2001 (2001-03-01),            XP011028385            ISSN: 1524-9050            the whole document</p>	1-16
A	<p>ANUJ SHARMA ET AL: "Detection of Inclement Weather Conditions at a Signalized Intersection using a Video Image Processing Algorithm"            DIGITAL SIGNAL PROCESSING WORKSHOP, 12TH - SIGNAL PROCESSING EDUCATION WORKSHOP, 4TH, IEEE, PI, 1 September 2006 (2006-09-01),            pages 150-155, XP031033455            ISBN: 978-1-4244-3534-0            the whole document</p>	1-16
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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 102005044486 A1	29-03-2007	NONE	