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- (81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,

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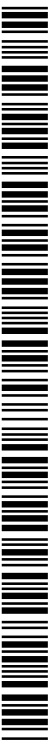
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— of inventorship (Rule 4.17(iv))

Published:

- with international search report (Art. 21(3))
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(54) **Title:** SYSTEM FOR LANE SELECTION BY AN AUTOMATED VEHICLE

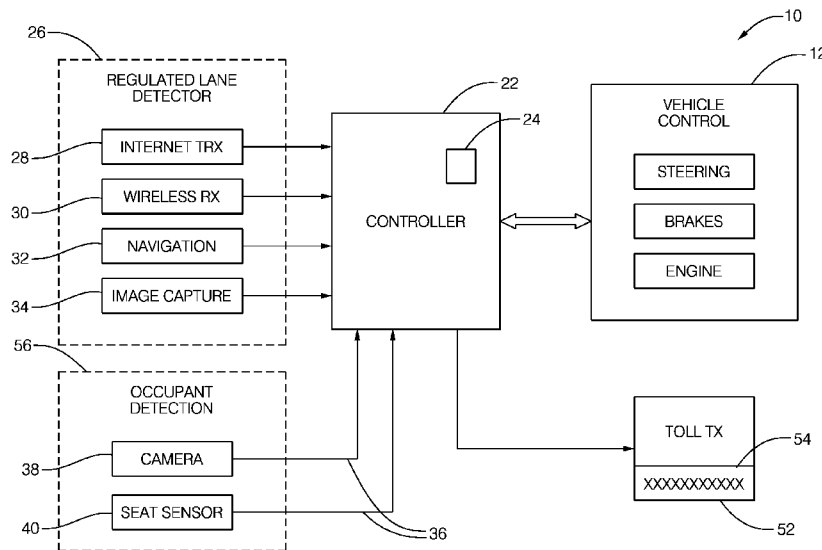


FIG. 2

(57) **Abstract:** A system (10) for automated operation of a vehicle (12) includes a controller (22) and a regulated-lane-detector (26). The controller (22) is operable to determine a vehicle-status (24) that indicates if the vehicle (12) complies with regulations to legally travel in a regulated-lane (18) of a roadway (16). The regulated-lane-detector (26) is in communication with the controller (22) and operable to determine when a regulated-lane (18) is present on a roadway (16). The system (10) selects a travel-lane (14) for the vehicle (12) to travel upon based on the vehicle-status (24).

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2016/019560**A. CLASSIFICATION OF SUBJECT MATTER****B60W 30/12(2006.01)i, B60W 10/20(2006.01)i, B60W 40/08(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B60W 30/12; G05D 1/02; B62D 6/00; B60W 30/00; B60R 11/02; B60W 40/06; B60R 16/02; B60W 10/20; B60W 40/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: path panning, regulated lane, HOV lane, toll lane, PODS, automated vehicle, unmanned vehicle, auto-steering, lane control, legal lane and U-turn lane

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	KR 10-1509995 B1 (HYUNDAI MOTOR COMPANY) 07 April 2015 See paragraphs [0004], [0032], [0036], [0068] and figures 2, 4-5, 9.	1-2, 10
A		3-9
Y	KR 10-2011-0101990 A (ARGUS INC.) 16 September 2011 See paragraphs [0021], [0023], [0036] and figures 1-3.	1, 2, 10
Y	KR 10-2010-0067988 A (LG INNOTECK CO., LTD.) 22 June 2010 See paragraphs [0011]-[0012] and figures 1-4.	10
A	US 2013-0184926 A1 (SPERO et al.) 18 July 2013 See abstract; paragraphs [0015]-[0030]; and figures 1-5C.	1-10
A	US 2014-0129084 A1 (HYUNDAI MOBIS CO., LTD.) 08 May 2014 See abstract; paragraphs [0027]-[0037]; and figures 1-4.	1-10

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

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"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

06 October 2016 (06.10.2016)

Date of mailing of the international search report

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International Application Division

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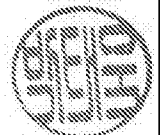
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2016/019560

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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