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(54) **Title:** SHORT HEADWAY COMMUNICATIONS BASED TRAIN CONTROL SYSTEM

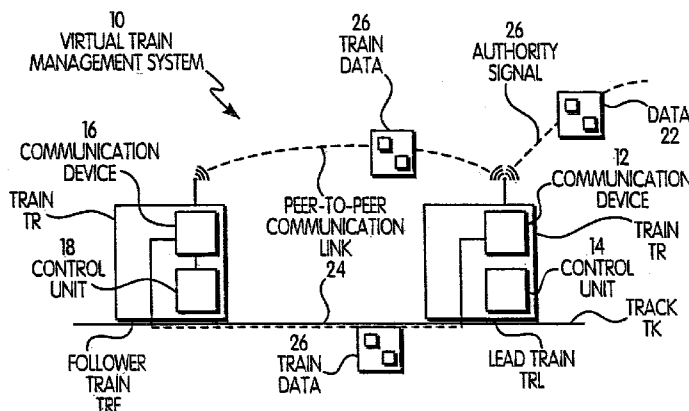


Fig. 1

(57) **Abstract:** A train control system, including: a communication device associated with at least one control unit located on a first train; and a communication device associated with at least one control unit located on a second train; wherein at least one of the control units of the first train and the second train is configured to: (i) receive, at the associated communication device, an authority signal including data sufficient to identify one of the first train and the second train as a lead train and the other of the first train and the second train as a follower train; (ii) establish at least one peer-to-peer communication link between the communication devices of the lead train and the follower train; and (iii) exchange train data between the lead train and the follower train via the at least one peer-to-peer communication link. An on-board control unit is also disclosed.

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

B. FIELDS SEARCHED

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Korean utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: train, control, peer-to-peer

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6539292 B1 (STANLEY R. AMES, JR.) 25 March 2003 See description column 4 line25-line52.	1-26
A	US 2006-0195236 A1 (KEIICHI KATSUTA et al.) 31 August 2006 See description paragraphs [0078]-[0080], [0084]-[0087].	1-26
A	KR 10-2003-0068960 A (LG IND. SYSTEMS CO., LTD.) 25 August 2003 See claims 1-3 and figures 1-6.	1-26

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

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US 6539292 B1	25.03.2003	None	
US 2006-0195236 A1	31.08.2006	CN 100551756 C CN 1824559 A CN 1824559 C0 DE 602006003674 D1 EP 1695890 A1 EP 1695890 B1 JP 04-375253 B2 JP 2006-232106 A JP 4375253 B2 US 7756613 B2	21.10.2009 30.08.2006 30.08.2006 02.01.2009 30.08.2006 19.11.2008 18.09.2009 07.09.2006 02.12.2009 13.07.2010
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