



(51) International Patent Classification:  
G05D 1/00 (2006.01)

(21) International Application Number:  
PCT/GB2007/050740

(22) International Filing Date:  
5 December 2007 (05.12.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0624610.2 11 December 2006 (11.12.2006) GB  
06270099.2 11 December 2006 (11.12.2006) EP

(71) Applicant (for all designated States except US): BAE SYSTEMS PLC [GB/GB]; 6 Carlton Gardens, London Greater London SW1Y 5AD (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): PUDDY, John David [GB/GB]; BAE SYSTEMS PLC, ATC Sowerby, PO Box 5, Filton Bristol BS34 7QW (GB).

(74) Agent: BAE SYSTEMS PLC; Group IP Department, P.O. Box 87, Farnborough Aerospace Centre, Farnborough, Hampshire GU14 6YU (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

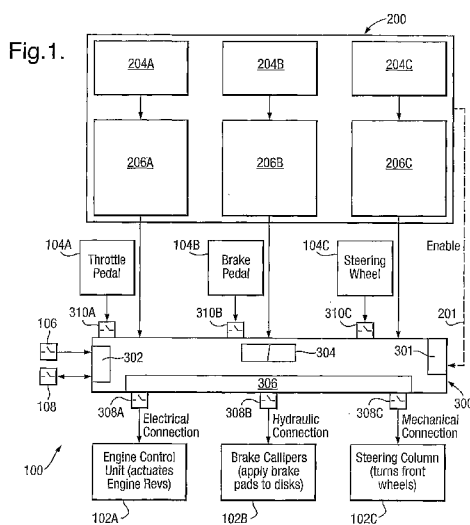
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:  
11 September 2009

(54) Title: CONTROLLING AN AUTONOMOUS VEHICLE SYSTEM



(57) Abstract: Controlling an Autonomous Vehicle System A system (300) is adapted to transfer control of movement of a vehicle to and/or from an autonomous vehicle system (200). The control system includes an activation sub-system that has an input device (302) configured to receive an activation signal (201) indicating that an autonomous vehicle system (200) is to be activated. A test device (301, 304) checks, upon receipt of the activation signal by the input device, if the autonomous vehicle system is in a ready state to be activated. If so, an activation device (306) can activate the autonomous vehicle system. The system (300) may also include at least one deactivation switch (310) that is configured, upon being switched on, to deactivate an autonomous vehicle system (200) from controlling movement of the vehicle.

WO 2008/072007 A3

## INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2007/050740

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. G05D1/00

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)  
G05D

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

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

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 196 48 943 A1 (TOYOTA MOTOR CO LTD [JP]) 19 June 1997 (1997-06-19) column 3, line 41 - column 4, line 51 figure 2	1,5,6,9, 10
X	US 2 960 284 A (PERKINS CORLES M) 15 November 1960 (1960-11-15) figure 1a	1,3-6,9, 10
Y	column 2, line 55 - column 3, line 4	2,7,8
Y	WO 03/045782 A (HONEYWELL INT INC [US]) 5 June 2003 (2003-06-05) page 16, lines 2-15; figure 6	2
Y	US 5 489 830 A (FERNANDEZ CARLOS P [US]) 6 February 1996 (1996-02-06) column 6, line 57 - line 61	7,8
	----- -/-- -----	

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

## \* 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.

\*&amp;\* document member of the same patent family

Date of the actual completion of the international search

6 July 2009

Date of mailing of the international search report

16/07/2009

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

Groen, Fokke

## INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2007/050740

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 1 218 471 A (SPERRY RAND CORP [US]) 6 January 1971 (1971-01-06) page 5, line 86 - line 100 -----	1-10
A	US 3 051 137 A (KUTZLER ROBERT J) 28 August 1962 (1962-08-28) column 3, line 31 - line 43; figure 1 -----	1-10
A	FR 2 660 454 A1 (COMMISSARIAT ENERGIE ATOMIQUE [FR]) 4 October 1991 (1991-10-04) the whole document -----	1-10

## INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2007/050740

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 19648943	A1	19-06-1997	JP 3239727 B2 17-12-2001
			JP 9161196 A 20-06-1997
			US 5774069 A 30-06-1998
US 2960284	A	15-11-1960	NONE
WO 03045782	A	05-06-2003	AU 2002324984 A1 10-06-2003
US 5489830	A	06-02-1996	NONE
GB 1218471	A	06-01-1971	DE 1556410 A1 19-02-1970
			FR 1570500 A 13-06-1969
			GB 1218472 A 06-01-1971
			JP 50011157 B 28-04-1975
			US 3386689 A 04-06-1968
US 3051137	A	28-08-1962	NONE
FR 2660454	A1	04-10-1991	NONE