



- (51) International Patent Classification:  
F02N 15/02 (2006.01) F02N 5/04 (2006.01)  
F02N 15/04 (2006.01)
- (21) International Application Number:  
PCT/NL2011/050794
- (22) International Filing Date:  
22 November 2011 (22.11.2011)
- (25) Filing Language:  
Dutch
- (26) Publication Language:  
English
- (30) Priority Data:  
2005722 18 November 2010 (18.11.2010) NL
- (71) Applicant (for all designated States except US): **DTI Group B.V.** [NL/NL]; Croy 46, NL-5653 LD Eindhoven (NL).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **VAN DRUTEN, Roëll Marie** [NL/NL]; Grasleeuwerik 8, NL-5658 EG Eindhoven (NL). **SERRARENS, Alexander Franciscus Anita** [NL/NL]; Adriaan van Ostadelaan 7, NL-5581 JS Waalre (NL). **VROEMEN, Bas Gerard** [NL/NL]; Melkweg 51, NL-5642 CP Eindhoven (NL).
- (74) Agent: **VERHEES, Godefridus Josephus Maria**; De Pinckart 54, NL-5674 CC Nuenen (NL).
- (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, BR, BW, BY, BZ, CA, CH, CL, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,

[Continued on next page]

(54) Title: STARTING METHOD AND STARTING DEVICE FOR STARTING A COMBUSTION ENGINE AND/OR DRIVING A VEHICLE

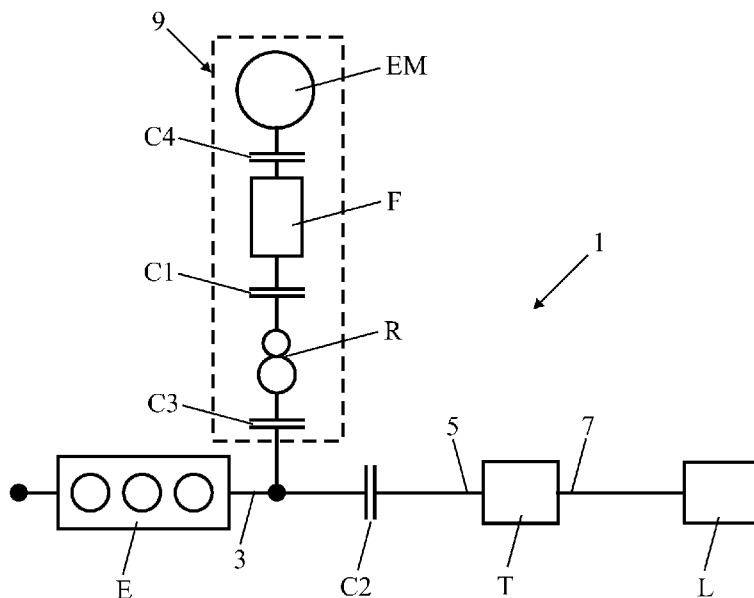


FIG. 1

(57) Abstract: A combustion engine E can be started by means of a starting device 9. During the starting operation attendant with the starting device 9 driving the vehicle 1 this driving is also effected by energizing a clutch C2 which connects the combustion engine E via a transmission T to the wheels L of the vehicle. By utilizing the starting device for the starting operation also for meanwhile driving the vehicle and/or accelerating same, a faster and/or more gradual drive/acceleration of the vehicle is realized.

WO 2012/067513 A3



UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

- 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))
- with information concerning request for restoration of the right of priority in respect of one or more priority claims (Rules 26bis.3 and 48.2(b)(vii))

**Published:**

- with international search report (Art. 21(3))

**(88) Date of publication of the international search report:**

29 November 2012

**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/NL2011/050794

**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. F02N15/02 F02N15/04  
 ADD. F02N5/04

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)  
 F02N

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 practicable, 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	GB 2 047 816 A (LUK LAMELLEN & KUPPLUNGSBAU) 3 December 1980 (1980-12-03)	1-6,8
Y	page 1, line 73 - page 3, line 128 figure	7,9,10
X	----- WO 2010/068100 A1 (DTI GROUP BV [NL]; VAN DRUTEN ROELL MARIE [NL]; VROEMEN BAS GERARD [NL]) 17 June 2010 (2010-06-17)	1-6,8
Y	claims 12, 23, 24, 27 figures	7,9,10
X	----- FR 2 729 435 A1 (KOVACS ANDRE LOUIS [FR]) 19 July 1996 (1996-07-19) the whole document	1-3
	-----	

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 application or patent 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  28 September 2012	Date of mailing of the international search report  11/10/2012
--	--

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  De Vita, Diego
--	--

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/NL2011/050794

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 2047816	A	03-12-1980	DE 2917139 A1 06-11-1980
			ES 8101199 A1 01-03-1981
			FR 2455188 A1 21-11-1980
			GB 2047816 A 03-12-1980
			JP 1038010 B 10-08-1989
			JP 1552074 C 23-03-1990
			JP 1642630 C 28-02-1992
			JP 2003528 A 09-01-1990
			JP 3007523 B 01-02-1991
			JP 55145022 A 12-11-1980
-----			
WO 2010068100	A1	17-06-2010	NONE
-----			
FR 2729435	A1	19-07-1996	NONE
-----			