#### (12)

## **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: **25.05.2011 Bulletin 2011/21** 

(51) Int Cl.: **F02N 11/08** (2006.01)

(43) Date of publication A2: **28.04.2010 Bulletin 2010/17** 

(21) Application number: 09165932.6

(22) Date of filing: 20.07.2009

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR Designated Extension States:

AL BA RS

(30) Priority: 24.10.2008 TW 97140902

(71) Applicant: Kwang Yang Motor Co., Ltd. Kaohsiung City 807 (TW)

- (72) Inventor: Hsu, Hsin-Sheng
  \_, Kaohsiung City (TW)
- (74) Representative: Lang, Christian LangRaible GbR Patent- und Rechtsanwälte Rosenheimerstrasse 139 81671 München (DE)

#### (54) Vehicle Starter Control System

(57)The present invention discloses a vehicle starter control system, which includes a power unit for supplying electric power, a main switch electrically connected to the power unit and a start switch electrically connected to the main switch, a motor relay, which is switched on by turning on the main switch and the start switch, and an electrically actuated motor, an engine set into operation by the motor, a generator which generates electric power once the engine is running, and an ignition device which controls ignition of the engine. Wherein, the vehicle starter control system is also provided with switching switches, which, after turning on the main switch and the start switch to establish electric conduction, enables temporarily disconnecting electric power from specific loads, such as the headlight, radiator fan, and the like (nonactivated related components), installed on the vehicle, thereby enabling the power unit to have sufficient electric power to actuate the motor so as to start the engine. Moreover, when the start switch has not been activated, the power unit is able to supply power to the load.

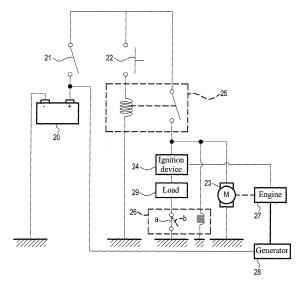


FIG. 2A



# **EUROPEAN SEARCH REPORT**

Application Number EP 09 16 5932

Category	Citation of document with ir of relevant pass:	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X Y	4 December 2002 (20 * abstract; claims		1-3,5-11 4,12	I INV. F02N11/08
Υ	DE 34 23 663 A1 (BC 9 January 1986 (198 * abstract; claims * page 7, line 18 -	1-3; figures 1,2 *	4,12	
Х	US 2 449 338 A (SUM 14 September 1948 ( * claim 3; figure 2 * column 3, line 31	1948-09-14)	1-3,5-8,	,
X		page 3, line 7 *	1-3,5,10	
X Y	ET AL) 12 December * abstract; figure		1-3,5	TECHNICAL FIELDS SEARCHED (IPC)
X		6-07)	1,5	
	The present search report has l	peen drawn up for all claims	1	
		Date of completion of the search	<del>'</del>	Examiner
		15 April 2011	Var	n der Staay, Fran
X : part Y : part docu A : tech O : non	ATEGORY OF CITED DOCUMENTS ioularly relevant if taken alone ioularly relevant if combined with anot unent of the same category inological background written disclosure rmediate document	L : document cited t	ocument, but publi te in the application for other reasons	ished on, or

### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 09 16 5932

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

15-04-2011

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 1262660	A2	04-12-2002	DE	10127053 A1	05-12-200
DE 3423663	A1	09-01-1986	JP JP	2505737 B2 61016264 A	12-06-199 24-01-198
US 2449338	Α	14-09-1948	NONE		
DE 3030317	A1	25-02-1982	NONE		
US 2002185098	A1	12-12-2002	NONE		
EP 1006277	A1	07-06-2000	AT DE ES	219819 T 19856131 A1 2177189 T3	15-07-200 08-06-200 01-12-200

FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82