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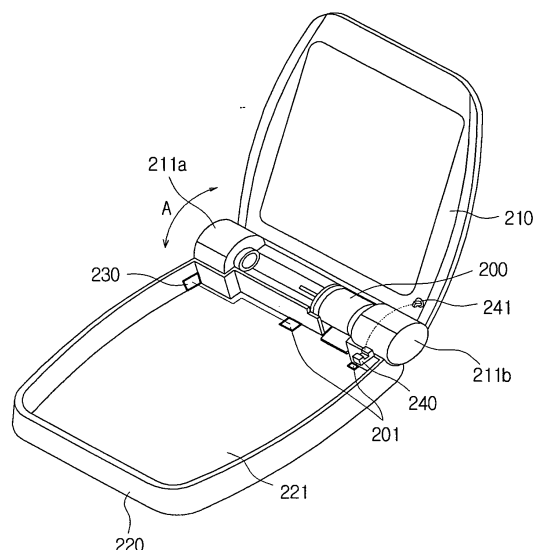
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(54) **Case module having auto-folder function and control method thereof**

(57) A case module and a method for controlling the cover rotation of the case module. The case module comprises a case, the case comprising a motor (200), the motor (200) enabling a cover (210) to rotate, said cover opening when a forward rotation switch (230) is turned on, said cover (210) closing when a reverse rotation switch (240) is turned on; a buffer (fig.6,660), the buffer generating a forward rotation signal or a reverse rotation signal, the forward rotation signal and the reverse rotation signal corresponding to the turn-on state of said forward rotation switch (230) or said reverse rotation switch (240), respectively; and a driving unit (fig.6,650a,650b), the driving unit (650a,650b) rotating said motor (200), said motor (200) using a signal from said buffer (660) as an input. The case module and the controlling method thereof control the forward rotation and the reverse rotation of the DC motor (200) and have the cover (210) open and close according to the rotation of the DC motor (200) by use of the driving circuit such that the inconvenience of having to manually open and close the cover (210) is eliminated.

Fig. 2





European Patent  
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# EUROPEAN SEARCH REPORT

Application Number  
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	US 5 779 032 A1 (IIMURA TAICHI [JP] ET AL) 14 July 1998 (1998-07-14)	1,11	INV. B65D43/26 A45D40/22 B65F1/16
A	* the whole document *	5,12	
Y	US 4 283 098 A1 (SUN LIANG-HUNG) 11 August 1981 (1981-08-11) * column 2, lines 11-44; figures 1,2 *	1,11	
A	GB 2 356 894 A (BELLING APPLIANCES LTD [GB]) 6 June 2001 (2001-06-06) * page 16, lines 6,7 *	2	
			TECHNICAL FIELDS SEARCHED (IPC)
			A45D A45C B65D B65F
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 14 March 2007	Examiner Escudero, Raquel
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03.82 (P04C01)

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

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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  
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14-03-2007

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5779032	A1	NONE	
US 4283098	A1	NONE	
GB 2356894	A	06-06-2001	NONE