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(72) Inventors:
• **Park, Jeongtaek**
153-802, Seoul (KR)
• **Huh, Deok**
153-802, Seoul (KR)

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(74) Representative: **Cabinet Plasseraud**
52, rue de la Victoire
75440 Paris Cedex 09 (FR)

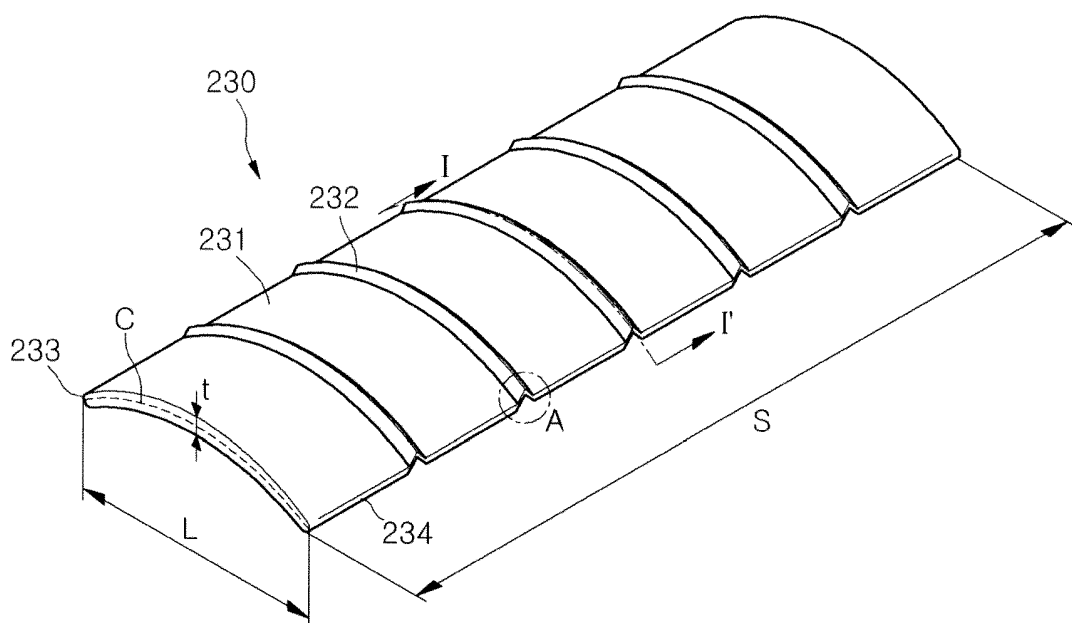
(71) Applicant: **LG Electronics Inc.**
Seoul 150-721 (KR)

(54) **Cross-flow fan and air conditioner equipped therewith**

(57) Provided are a cross-flow fan and an air conditioner including the same. A blade constituting the cross-

flow fan may be changed in shape to reduce a turbulence intensity of a discharge part of the fan and noises of the fan.

Fig. 3



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EUROPEAN SEARCH REPORT

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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)
X	JP 9 014182 A (DAIKIN IND LTD) 14 January 1997 (1997-01-14)	1	INV. F04D17/04 F04D29/28
A	* abstract; figures 8,10,11,13 *	2	
A	JP 2009 133271 A (MITSUBISHI ELECTRIC CORP) 18 June 2009 (2009-06-18) * abstract; figures 23,24 *	1	
A	JP 2006 002691 A (CALSONIC KANSEI CORP) 5 January 2006 (2006-01-05) * abstract; figures 4-6 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			F04D
1	Place of search The Hague	Date of completion of the search 5 September 2012	Examiner Ingelbrecht, Peter
CATEGORY OF CITED DOCUMENTS 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 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 & : member of the same patent family, corresponding document			

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**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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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 9014182 A	14-01-1997	JP 2822934 B2 JP 9014182 A	11-11-1998 14-01-1997
JP 2009133271 A	18-06-2009	JP 4840343 B2 JP 2009133271 A	21-12-2011 18-06-2009
JP 2006002691 A	05-01-2006	NONE	