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(54) **Centrifugal fan, particularly for extractor hoods and fume extractors**

(57) A centrifugal fan comprises a casing (2) having a helical external profile, defined by a pair of half-shells (2a, 2b) capable of being coupled to each other, a fan wheel (3) mounted in the casing (2) and capable of being driven in rotation about a first axis (X), there being defined in the casing (2) a lateral suction aperture (6), coaxial with the first axis (X), and a tangential delivery aperture (5), coaxial with a second axis (Y) directed tangentially to the fan wheel (3), inside the casing (2) a pressure chamber (7) being defined having a volume formed between the fan wheel (3) and the inner helical profile (3b) of the casing (2). The fan further comprises a flow separator (8) arranged at the zone (M) having the smallest radial distance between the fan wheel (3) and the inner profile (3b) of the casing (2), the flow separator (8) being defined conjointly by a pair of appendages (9), each formed in the respective casing half-shell (2a, 2b).

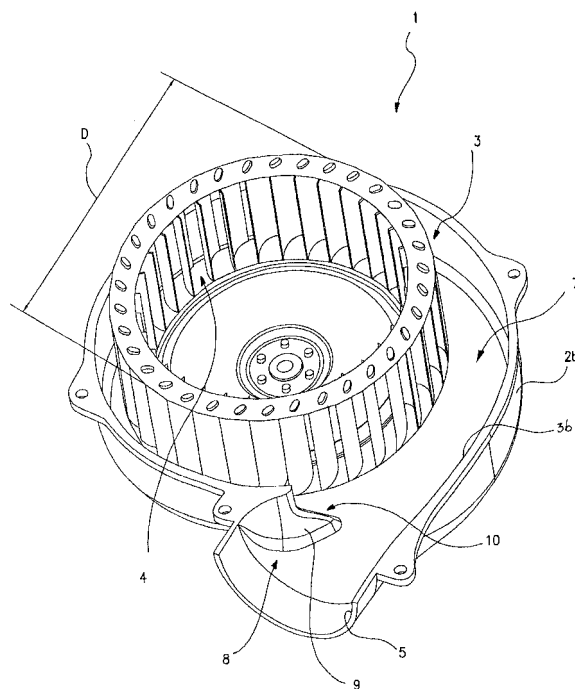


Fig. 1

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 29920373 U1	13-01-2000	DE 10017808 A1	13-06-2001
US 2006051204 A1	09-03-2006	US 2006051206 A1	09-03-2006
US 2005214114 A1	29-09-2005	TW 228216 B	21-02-2005
EP 1094224 A2	25-04-2001	AT 255684 T	15-12-2003
		DE 19950245 C1	10-05-2001
		ES 2209745 T3	01-07-2004
		PT 1094224 E	30-04-2004
US 2002131861 A1	19-09-2002	DE 10211548 A1	17-10-2002
		JP 4026366 B2	26-12-2007
		JP 2002339899 A	27-11-2002
US 2003049122 A1	13-03-2003	CN 1403717 A	19-03-2003
		JP 4037664 B2	23-01-2008
		JP 2003074497 A	12-03-2003
		KR 20030018405 A	06-03-2003
FR 2875560 A1	24-03-2006	NONE	

EPO FORM P0459

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