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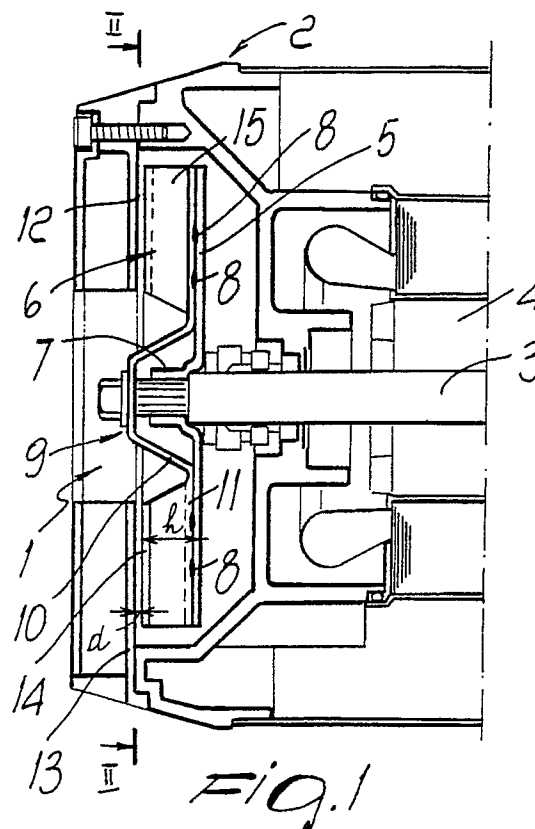
71 Applicant: **NOWAX S.r.l.**
Via Mazzini, 2
36040 Brendola (Vicenza)(IT)

72 Inventor: **Caoduro, Bruno**
Via Tecchio 76
Montecchio Maggiore, Vicenza(IT)

74 Representative: **Forattini, Amelia**
c/o Internazionale Brevetti Ingg. ZINI,
MARANESI & C. S.r.l. Piazza Castello 1
I-20121 Milano(IT)

54 **Open bladed impeller, particularly for centrifugal pump.**

57 The present invention relates to an open bladed impeller (1), particularly for a centrifugal pump, comprising a substantially planar disk-like supporting element (5) having a central hub (7) adapted to be keyed to a drive shaft (3) and a plurality of blades (6) rigidly attached to the front surface of said supporting element at regularly angularly spaced locations thereof, wherein each blade is formed by a longitudinal core (15) extending transversely of the main plane of said supporting element, and has a back longitudinal edge (11) affixed to said supporting element and a front longitudinal edge (12) adapted to cooperate with an adjacent stationary wall (13) of the casing; the front longitudinal edge of each blade has a profile which is substantially parallel to the inner surface of the stationary wall with such a substantially uniform axial clearance (d) to form a free frontal skimming surface providing partial sealing with said stationary wall. At the front longitudinal edge of each blade there is provided a substantially planar, longitudinal flange formation which projects laterally from said longitudinal core to extend parallel to the facing surface of the stationary wall, to thereby increase extension of the front skimming surfaces and improve their sealing action relative to the inner casing wall.



EP 0 406 788 A3



DOCUMENTS CONSIDERED TO BE RELEVANT			EP 90112638.3
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 5)
X	JP - A - 54-137 102 (EBARA)	1-5, 7, 8	F 04 D 29/18
Y	* Totality * & PATENT ABSTRACTS OF JAPAN, unexamined applications, M field, vol. 3, no. 158, December 25, 1979 THE PATENT OFFICE JAPANESE GOVERNMENT page 136 M 86 + Kokai-No. 54-137 102 (EBARA) + --	6	
Y	DD - A3 - 259 975 (VEB GERÄTE- UND PUMPENBAU MERBELSROD) * Totality * --	6	
A	PATENT ABSTRACTS OF JAPAN, unexamined applications, M field, vol. 9, no. 231, September 18, 1985 THE PATENT OFFICE JAPANESE GOVERNMENT page 162 M 414 * Kokai-No. 60-88 895 (MICHITSUGU) * --	1	TECHNICAL FIELDS SEARCHED (Int. Cl.5) F 04 D 1/00 F 04 D 29/00
A	DE - A1 - 3 704 360 (KSB) * Totality * ----	1	
The present search report has been drawn up for all claims			
Place of search VIENNA		Date of completion of the search 04-04-1991	Examiner WERDECKER
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			