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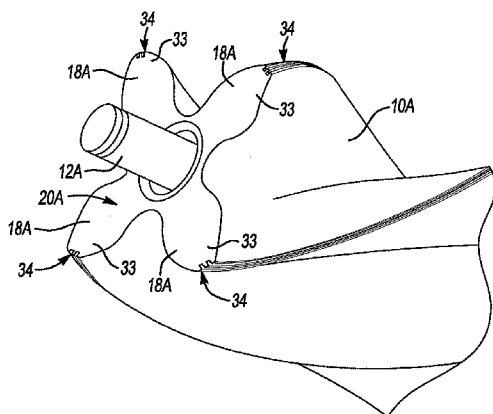
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**Fig-1**

(57) Abstract: A supercharger assembly includes a rotor housing having an inner surface. A first and a second rotor are configured to rotate within the housing. The first and the second rotors each have multiple lobes. The lobes of the first rotor mesh with the lobes of the second rotor and the lobes of both rotors have tips that define at least a predetermined clearance with the inner surface of the rotor housing. At least a portion of one of the tips has an uneven surface to increase turbulence of air flow through the predetermined clearance. The increased turbulence of the air flow slows the air flow, thereby reducing leakage and increasing the efficiency of the supercharger assembly. A method of manufacturing a rotor for a supercharger assembly includes creating at least one recess in a tip of a lobe of the rotor to provide an uneven surface at the tip.

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**A. CLASSIFICATION OF SUBJECT MATTER**  
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 ADD.  
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**B. FIELDS SEARCHED**  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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Y	page 1; figures 1, 5, 6, 7, 8 -----	4,5,12
X	US 6 116 879 A (TERAOKA MASAO [JP]) 12 September 2000 (2000-09-12)  column 5, line 5 - column 6, line 3; figures 10,11 -----	1-3,7,8, 10,11, 14-21
X	JP 2002 364570 A (TOCHIGI FUJI SANGYO KK) 18 December 2002 (2002-12-18)  abstract; figures 1,2,3,6,7 -----  -/--	1-4,6,8, 9,11,13, 15-21

Further documents are listed in the continuation of Box C.

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\* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p>
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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X	JP 2002 130164 A (TOCHIGI FUJI SANGYO KK) 9 May 2002 (2002-05-09)  abstract; figures 1,2,5,6,7 -----	1-3,6,8, 9,11,13, 15-21
X	WO 01/07759 A1 (DRESSER EQUIPMENT GROUP INC [US]; SUN XIAOHUA [US]) 1 February 2001 (2001-02-01) page 4; figures 4-6 -----	1-3,8, 11,15-21
Y	US 3 174 274 A (FRYE REINHOLD A) 23 March 1965 (1965-03-23) column 4, line 22 - line 31; figures 6,7 -----	4,5,12

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Information on patent family members

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