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[Continued on next page]

(54) Title: MULTISTAGE CENTRIFUGAL TURBOMACHINE

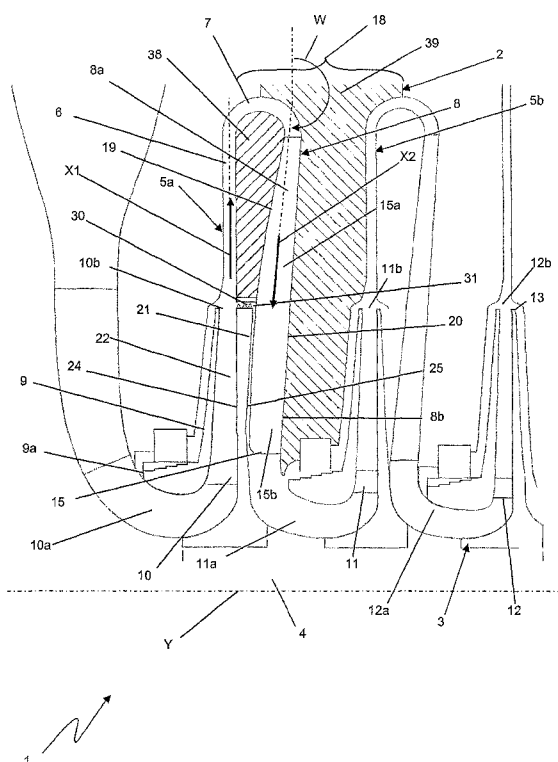


Fig. 2

(57) Abstract: A multistage centrifugal turbomachine (1) comprising: - a rotor assembly (3) including a shaft (4) carrying a first and a second impeller (10, 11); - a stator (2) including a passage (5) for a fluid flowing from an outlet side (10b) of the first impeller (10) to an inlet side (11a) of the second impeller (11); the passage (5) comprising a diffuser (6) downstream the outlet side (10b) of the first impeller (10), a return channel (8) upstream the inlet side (11a) of the second impeller (11) and a bend (7) connecting the diffuser (6) and the return channel (8), a plurality of stator blades (15) being provided in the return channel (8); wherein a portion (8b) of the return channel (8) is delimited by the first impeller (10), said plurality of stator blades (15) extending at least partially in said portion (8b) of the return channel (8).



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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 1 281 478 A (ANTISELL FRANK L [US]) 15 October 1918 (1918-10-15) page 1, line 64 - page 2, line 34; figure 1 -----	1,2,8,9
X	US 2 543 923 A (MIXSELL WARD T) 6 March 1951 (1951-03-06) column 2, line 47 - column 3, line 25; figure 1 -----	9,10
A		1
X	US 6 162 015 A (NAGAI YUJI [JP] ET AL) 19 December 2000 (2000-12-19) column 5, line 1 - column 6, line 17; figures 2,3,5 column 6, line 43 - line 47 -----	9
A		1
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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A	AL) 6 September 1994 (1994-09-06) column 2, line 39 - column 3, line 13; figures 2,3 -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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