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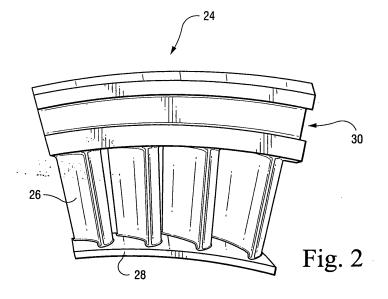
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#### (54) Method of manufacturing segmented stators for a steam turbine

(57) A method of manufacturing reaction nozzles for a turbine comprising (a) providing a piece of flat plate stock (38) of predetermined size and thickness; and (b)

machining the piece of flat plate stock to form a unitary, arcuate reaction nozzle segment (24) including at least two adjacent nozzle airfoils (26).





#### PARTIAL EUROPEAN SEARCH REPORT

Application Number

EP 06 25 2184

under Rule 62a and/or 63 of the European Patent Convention. This report shall be considered, for the purposes of subsequent proceedings, as the European search report

	DOCUMENTS CONSIDERE	D TO BE RELEVANT	_	
Category	Citation of document with indicat of relevant passages	ion, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
E	EP 1 785 594 A2 (GEN E 16 May 2007 (2007-05-1 * abstract * * paragraph [0020] - p figures 7,8 *	6)	1	INV. F01D9/02 F01D9/04
E	EP 1 764 482 A2 (GEN E 21 March 2007 (2007-03 * abstract * * paragraph [0012] - p * figure 1 *	-21)	1	
A	US 6 425 738 B1 (SHAW 30 July 2002 (2002-07- * abstract * * column 2, line 47 - * figures 1,2 *	30)	1	
				TECHNICAL FIELDS SEARCHED (IPC)
The Searc	MPLETE SEARCH  sh Division considers that the present applicate with the EPC so that only a partial search of the		/do	
	arched completely :			
Claims se	arched incompletely :			
Claims no	t searched :			
	or the limitation of the search: sheet C			
	Place of search	Date of completion of the search		Examiner
	Munich	31 August 2011	Mie	elimonka, Ingo
X : parti Y : parti docu	ATEGORY OF CITED DOCUMENTS  icularly relevant if taken alone icularly relevant if combined with another ument of the same category nological background written disclosure	T : theory or principl E : earlier patent doc after the filing dat D : document cited in L : document cited in	oument, but publice n the application or other reasons	shed on, or

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## INCOMPLETE SEARCH SHEET C

Application Number

EP 06 25 2184

Claim(s) searched incompletely: 1
Claim(s) not searched: 2-10
Reason for the limitation of the search:
According to the applicant has not replied within a period of two months to the request for clarification (Rule 62a EPC), the search will be carried out on the basis of the first claim in each category. In this case, this will be claim 1.

#### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 06 25 2184

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

31-08-2011

	Patent document ted in search report		Publication date	Patent family member(s)	Publication date
EP	7 1785594	A2	16-05-2007	CN 101016846 A JP 2007132353 A US 2007110571 A1	15-08-200 31-05-200 17-05-200
EP	7 1764482	A2	21-03-2007	CN 1928326 A JP 2007071209 A KR 20070028254 A US 2007053773 A1	14-03-200 22-03-200 12-03-200 08-03-200
US	6425738	B1	30-07-2002	NONE	
				opean Patent Office, No. 12/82	