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[Continued on next page]

(54) Title: INTEGRAL SINGLE CRYSTAL/COLUMNAR GRAINED COMPONENT AND METHOD OF CASTING THE SAME

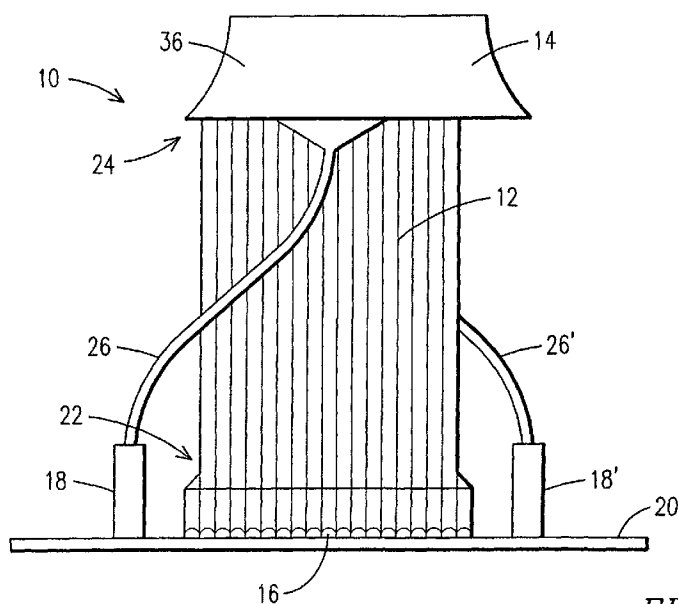


FIG. 1

(57) Abstract: A hybrid cast component (10) including both a columnar grained region (12) and a single crystal region (14) integrally formed and joined along a metallurgical boundary (32) in a single casting operation without the need for any weld or braze. A gas turbine blade formed as such may include a columnar grained airfoil and a single crystal platform without any necessity for a thermally formed joint at the blade fillet area.

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 637 476 A (HITACHI LTD [JP]; TOHOKU ELECTRIC POWER CO [JP]) 8 February 1995 (1995-02-08) the whole document	1,2,4,5, 8,9
Y		6,7
A		3
Y	US 4 464 094 A (GERKEN JOHN M [US]) 7 August 1984 (1984-08-07) cited in the application claim 3	6,7



Further documents are listed in the continuation of Box C.



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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.

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