

Title (en)

Rotor, means and method of making the same by moulding.

Title (de)

Flügelrad, Vorrichtungen und Verfahren zu dessen Herstellung durch Giessen.

Title (fr)

Roue à aubes et outillages et procédés pour les fabriquer par moulage.

Publication

EP 0061375 A1 19820929 (FR)

Application

EP 82400384 A 19820305

Priority

FR 8105063 A 19810313

Abstract (en)

A pump impeller comprises a web 4 Fig. 1 forming a hub, which is a surface of revolution about an axis X, X' and from which project helico-centrifugal vanes 1. The imaginary projection of the generating line of the web 4 intersects the hub axis X, X' and the lower and upper faces 2, 3 of the vanes 1 extend over portions of surfaces of cylinders, the axes Y, Y' of which are inclined relative to the axis (X, X') of the hub. The impeller is made by constructing a pattern having vanes 12, Fig. 2, using the pattern to form a sand mould, withdrawing the pattern from the sand by giving the vanes a translational movement along their axis of revolution, and then filling the mould cavities with liquid metal. <IMAGE>

Abstract (fr)

Cette roue comprend un flasque (4) formant moyeu qui est de révolution autour d'un axe (X, X') et duquel naissent des aubes (1) hélico-centrifuges admettant l'axe (X, X') du moyeu comme axe de répétition, le prolongement imaginaire de la génératrice du flasque (4) coupe l'axe du moyeu et les intrados et extrados des aubes (1) s'étendent sur des portions de surfaces de cylindres dont les axes (Y, Y') sont inclinés par rapport à celui (X, X') du moyeu. Application aux pompes.

IPC 1-7

F04D 29/22; B22C 9/10; B22C 9/22

IPC 8 full level

B22C 9/10 (2006.01); **F04D 29/22** (2006.01)

CPC (source: EP)

B22C 9/10 (2013.01); **F04D 29/2222** (2013.01)

Citation (search report)

- [X] FR 2396191 A1 19790126 - KAWASAKI HEAVY IND LTD [JP]
- [X] CH 346644 A 19600531 - MASCHF AUGSBURG NUERNBERG AG [DE]
- [A] DE 1508710 A1 19691030 - NORTH AMERICAN ROCKWELL
- [A] US 4231413 A 19801104 - BRETZGER GRAHAM
- [A] US 3206807 A 19650921 - HOFFMAN ROBERT F, et al

Cited by

CN111790903A; US6082000A; EP0864758A3

Designated contracting state (EPC)

AT DE LU NL SE

DOCDB simple family (publication)

EP 0061375 A1 19820929; BE 892410 A 19820908; FR 2501801 A1 19820917; GB 2094897 A 19820922; IT 1157637 B 19870218; IT 8212447 A0 19820224

DOCDB simple family (application)

EP 82400384 A 19820305; BE 6047619 A 19820308; FR 8105063 A 19810313; GB 8207477 A 19820315; IT 1244782 A 19820224