

Title (en)
Centrifugal pump

Title (de)
Kreiselpumpe

Title (fr)
Pompe centrifuge

Publication
EP 2420678 A1 20120222 (EN)

Application
EP 10008738 A 20100821

Priority
EP 10008738 A 20100821

Abstract (en)
A centrifugal pump having at least one impeller (32), a pump housing and an electrical motor. The pump has a Q-H pump curve (4) having a head H_o (28) at zero flow and a head H_{ref} (30) corresponding to the highest hydraulic power and that H_{ref} (30) is greater than H_o (28). The pump has low energy consumption rate, especially at low flow corresponding to the conditions in which the pump is operated most of the time. Thus, the pump according to the invention is less energy consuming than the prior art centrifugal pumps.

IPC 8 full level
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Citation (search report)

- [XY] GB 2005768 A 19790425 - PLESSEY CO LTD
- [YA] CN 1210705 A 19990317 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [A] CN 200952491 Y 20070926 - XIXIA VEHICLE WATER PUMP CO LT [CN]
- [A] SU 1581865 A1 19900730 - VNII GORNOJ MEKH [SU]
- [Y] EP 0551550 A1 19930721 - SIEMENS AG [DE]
- [Y] US 2007132330 A1 20070614 - FEI RENYAN W [CN], et al
- [A] TROSKOLANSKI A: "Les Turbopompes Théorie, tracé et construction", 1 January 1977, LES TURBOPOMPES THÉORIE, TRACÉ ET CONSTRUCTION,, PAGE(S) 250 - 253, XP007916630

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DOCDB simple family (publication)
EP 2420678 A1 20120222; **EP 2420678 B1 20150225**; **EP 2420678 B2 20180815**; CN 103069171 A 20130424; CN 103069171 B 20160803; RU 2013112610 A 20140927; RU 2556153 C2 20150710; US 2013216407 A1 20130822; WO 2012025289 A1 20120301

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EP 10008738 A 20100821; CN 201180040484 A 20110711; EP 2011061741 W 20110711; RU 2013112610 A 20110711; US 201113818166 A 20110711