

Title (en)

Improvement in the pumping chamber of a centrifugal turbine pump

Title (de)

Verbesserungen in der Pumpkammer einer Zentrifugalturbinenpumpe

Title (fr)

Amélioration de chambre de pompage dans une pompe à turbine centrifuge

Publication

EP 1855013 A2 20071114 (EN)

Application

EP 07107006 A 20070426

Priority

IT PN20060038 A 20060512

Abstract (en)

Centrifugal turbine pump comprising an intake conduit (1), a delivery conduit, a pumping chamber (3), an impeller (4) housed in the pumping chamber and provided with a plurality of vanes (5), wherein the intake conduit is coupled to the pumping chamber via a slightly conical flaring at the inlet-side section (16) of said intake conduit into the pumping chamber. Preferably, the edge (10) of said impeller facing the intake conduit comprises a corner-shaped section (7), wherein said corner projects into the inlet-side section of said intake conduit. Alternatively, the site (8) at which said pumping chamber (3) couples to the inlet-side section of the intake conduit (1) is provided in the form of two contiguous pleats (30,31) resembling the bellows of an accordion, which define an annular accommodation (32) in which there are rotatably accommodated said corner-shaped portions (7) of respective ones of the vanes of said impeller.

IPC 8 full level

F04D 29/42 (2006.01)

CPC (source: EP)

F04D 29/4273 (2013.01)

Cited by

CN113530875A; WO2015099526A1; USD921050S; USD926820S; USD939584S; USD947249S; USD947250S; USD947248S

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1855013 A2 20071114; EP 1855013 A3 20131023; IT PN20060038 A1 20071113

DOCDB simple family (application)

EP 07107006 A 20070426; IT PN20060038 A 20060512