

Title (en)
FLOW-THROUGH TURBINE WITH TURNING BLADES

Title (de)
DURCHSTROMTURBINE MIT DREHBAREN SCHAUFELN

Title (fr)
TURBINE À ÉCOULEMENT CONTINU À PALES ROTATIVES

Publication
EP 2473732 A2 20120711 (EN)

Application
EP 10766131 A 20100902

Priority
• SK 50582009 A 20090903
• SK 2010000004 W 20100902

Abstract (en)
[origin: WO2011028187A2] Flow-through turbine with turning blades works on the principle of the rotor (3), advantageously another rotor (3) and with using the stator (1), in which the rotor (3) is placed and rotates. The rotor (3) with at least one border element (3) delimits, together with at least two blades (4.1), advantageously shaped, non-sealed working space (9.1), (9.2) of the rotor (3), in which at least two blades are rotating (4.1). Flow of the fluid (2) into the working space (9.1), (9.2) of the rotor (3) sets the blades (4.1) of the rotor (3), placed on outside perimeter of the rotor (3) into rotation motion in such manner that it put up pressure on at least two blades (4.1), advantageously shaped, when these lean individually in the starting position against at least one stopper (3.2), placed towards the centre of the rotor (3), kinetic energy of the fluid (2) is transformed to rotary motion of the turbine and its shaft (3.3), then, according to design of the turbine, in approx. 180° rotation of the rotor (3), tilts after working space (9.1) in the dead point and with minimum resistance in the direction of flowing fluid (2), its turbulences, effects of hydrodynamic shape of the blade (4.1) wing in cross-section and effect of centrifugal rotary forces of rotating rotor (3), by its rotation approx. by 180°, they move in non-working space (9.2) of the rotor (3) into starting position.

IPC 8 full level
F03B 17/06 (2006.01); **F03D 3/06** (2006.01)

CPC (source: EP US)
F03B 17/065 (2013.01 - EP); **F03D 3/02** (2013.01 - EP US); **F03D 3/04** (2013.01 - EP US); **F03D 3/067** (2013.01 - EP); **Y02E 10/30** (2013.01 - EP); **Y02E 10/74** (2013.01 - EP)

Citation (search report)
See references of WO 2011028187A2

Citation (examination)
• US 4095422 A 19780620 - KURAKAKE YOSHIO
• US 3928771 A 19751223 - STRAUMSNES O ROBERT
• GB 2453537 A 20090415 - CUTLER GEORGE DONALD [GB]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
WO 2011028187 A2 20110310; WO 2011028187 A3 20111027; EP 2473732 A2 20120711; SK 287751 B6 20110804; SK 50582009 A3 20110304

DOCDB simple family (application)
SK 2010000004 W 20100902; EP 10766131 A 20100902; SK 50582009 A 20090903