

Title (en)

Method and system for detecting cavitation of pump and frequency converter

Title (de)

Verfahren und System zum Erkennen der Kavitation einer Pumpe und Frequenzwandler

Title (fr)

Procédé et système pour détecter la cavitation d'une pompe et convertisseur de fréquence

Publication

EP 2196678 B1 20120711 (EN)

Application

EP 08171028 A 20081209

Priority

EP 08171028 A 20081209

Abstract (en)

[origin: EP2196678A1] A method and a system in accordance with a pump controlled with a frequency converter. The method comprising the steps of controlling the pump (4) with a frequency converter (2), the frequency converter (2) feeding a motor (3) connected to drive the pump, providing a torque estimate (T_{est}) and/or a rotational speed estimate (n_{est}) of the motor from the frequency converter, forming one or more features (Feature1, Feature2, Feature3, Feature4) indicating cavitation or likelihood of cavitation of the pump (4) and/or reverse flow of the pump (4) using the provided estimates (T_{est} , n_{est}) and detecting cavitation or likelihood of the cavitation of the pump and/or reverse flow of the pump from one or more of the formed features (Feature1, Feature2, Feature3, Feature4).

IPC 8 full level

F04D 15/00 (2006.01); **F04D 29/66** (2006.01)

CPC (source: EP US)

F04D 15/0066 (2013.01 - EP US); **F04D 15/0088** (2013.01 - EP US); **F04D 29/669** (2013.01 - EP US)

Cited by

US9689396B2; EP4361445A1; WO2024089115A1; EP2505846A1; EP4372221A1; EP2589813A1; US2013108479A1; US10041824B2; US11635317B2; EP2696175A1; WO2014023642A1; US9416787B2; EP2640973B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2196678 A1 20100616; **EP 2196678 A9 20101027**; **EP 2196678 B1 20120711**; CN 101750258 A 20100623; CN 101750258 B 20140827; DK 2196678 T3 20120806; US 2010143157 A1 20100610

DOCDB simple family (application)

EP 08171028 A 20081209; CN 200910253636 A 20091207; DK 08171028 T 20081209; US 62866909 A 20091201