Title (en)

OVERLOAD SAFETY ARRANGEMENT FOR A CENTRIFUGAL PUMP

Publication

EP 0340696 A3 19901114 (DE)

Application

EP 89107847 A 19890429

Priority

DE 3814948 A 19880503

Abstract (en)

[origin: EP0340696A2] In the case of known overload safety arrangements for centrifugal pumps, temperature sensors, which are immersed directly into the liquid medium conveyed by the pump, are used to measure the temperature. Should the temperature measured by the temperature sensors deviate from a predetermined temperature reference value, an outlet valve is opened via an adjusting device and/or an acoustic or visual signal is triggered or the pump drive is switched off. In so doing the danger exists, particularly when conveying liquids containing chemically aggressive substances and/or abrasive solids, that the temperature sensors will be very quickly destroyed and therefore fail as measuring instruments to detect the operating temperature. These overload safety arrangements are also relatively complex in their design. According to the invention, on the other hand, an overload safety arrangement for centrifugal pumps, which is of particularly simple design and always functions, is achieved in that the outlet valve (11) and the temperature sensors (2, 3) are arranged in the wall (1) of the spiral housing, the temperature sensors (2, 3) being arranged in the body of the wall (1) of the spiral housing at a distance (d) from the inner wall surface (18). <

IPC 1-7

F04D 15/02; F04D 29/42

IPC 8 full level

F04D 15/00 (2006.01); F04D 15/02 (2006.01); F04D 29/42 (2006.01)

CPC (source: EP)

F04D 15/0011 (2013.01); F04D 15/0263 (2013.01); F04D 29/426 (2013.01)

Citation (search report)

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WO2011123892A1

Designated contracting state (EPC)

AT BE DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0340696 A2 19891108; EP 0340696 A3 19901114; DE 3814948 A1 19891116

DOCDB simple family (application)

EP 89107847 A 19890429; DE 3814948 A 19880503