Title (en)

MIXING SYSTEM FOR FIRE EXTINGUISHING SYSTEMS, AND METHOD FOR OPERATING SUCH A MIXING SYSTEM

Title (de)

ZUMISCHSYSTEM FÜR FEUERLÖSCHANLAGEN UND VERFAHREN ZUM BETRIEB EINES SOLCHEN ZUMISCHSYSTEMS

Title (fr)

SYSTÈME DE MÉLANGE DESTINÉ À DES SYSTÈMES D'EXTINCTION D'INCENDIE, ET PROCÉDÉ DE FONCTIONNEMENT D'UN TEL SYSTÈME DE MÉLANGE

Publication

EP 4041442 B1 20231129 (DE)

Application

EP 20789024 A 20201002

Priority

- DE 102019215406 A 20191008
- EP 2020077617 W 20201002

Abstract (en)

[origin: WO2021069313A1] The invention relates to an mixing system (1) for fire extinguishing systems for producing an extinguishing agent-extinguishing agent additive mixture (premix) by mixing an extinguishing agent additive, in particular a foaming agent, with an extinguishing agent, in particular water. The mixing system (1) has a motor (2) which can be driven by a flow of extinguishing agent, a mixing pump (6) which is connected to the motor (2) for pumping the extinguishing agent additive, a mixing line (10), and an extinguishing agent additive line (13), from which the extinguishing agent additive is mixed with the extinguishing agent in the mixing line (10). The mixing system (1) additionally has a branching line (17), from which a part of the flow of extinguishing agent can be branched off if the load in the fire extinguishing system only requires a small flow of extinguishing agent. In this manner, the flow of extinguishing agent flowing through the motor (2) is artificially increased so that the motor (2) runs in a higher rotational speed range in which a reliable operation of the motor is ensured (a so-called start-up flow reduction). According to the invention, the mixing system (1) additionally has a motor rotational speed measuring device (22) and a controller, said controller being designed to completely or partly open and/or close the branching valve (21) on the basis of the motor rotational speed measured by the motor rotational speed measuring device (22).

IPC 8 full level

B01F 23/451 (2022.01); **A62C 5/00** (2006.01); **A62C 5/02** (2006.01); **B01F 23/40** (2022.01); **B01F 35/83** (2022.01)

CPC (source: CN EP US)

A62C 5/00 (2013.01 - CN); **A62C 5/002** (2013.01 - US); **A62C 5/02** (2013.01 - CN US); **B01F 23/451** (2022.01 - EP); **B01F 23/49** (2022.01 - EP); **B01F 35/831** (2022.01 - EP US); A62C 5/02 (2013.01 - EP)

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 RS SE SI SK SM TR

DOCDB simple family (publication)

DE 102019215406 A1 20210408; CN 114502244 A 20220513; CN 114502244 B 20230602; EP 4041442 A1 20220817; EP 4041442 B1 20231129; ES 2972022 T3 20240610; PL 4041442 T3 20240415; US 2022362595 A1 20221117; WO 2021069313 A1 20210415

DOCDB simple family (application)

DE 102019215406 A 20191008; CN 202080070136 A 20201002; EP 2020077617 W 20201002; EP 20789024 A 20201002; ES 20789024 T 20201002; PL 20789024 T 20201002; US 202017767327 A 20201002