

Title (en)

MIXING SYSTEM FOR FIRE EXTINGUISHING SYSTEMS

Title (de)

ZUMISCHSYSTEM FÜR FEUERLÖSCHANLAGEN

Title (fr)

SYSTÈME DE MÉLANGE POUR INSTALLATIONS D'EXTINCTION D'INCENDIE

Publication

EP 4414060 A1 20240814 (DE)

Application

EP 24164345 A 20201102

Priority

- DE 202019004525 U 20191105
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- EP 2020080632 W 20201102

Abstract (en)

[origin: WO2021089456A2] The invention relates to an adding system for fire-extinguishing units for producing a mixture of extinguishing agent and extinguishing agent additive (premix) by adding an extinguishing agent additive, in particular a foaming agent, to an extinguishing agent, in particular water, the adding system comprising a motor (1), which can be driven by the extinguishing agent stream, an adding pump (20), which can be driven by the motor (1), an adding line and an extinguishing agent additive line. The aim of the invention is to increase the operational reliability of an adding system of this type. This aim is achieved by various measures: The outer wall of the working chamber (10) of the motor (1), which is in the form of a rotation motor, can have the shape of a logarithmic spiral. Furthermore, the wall of the drainage housing (5) of the motor (1), which is in the form of a rotation motor, can have a through-slot (12, 13) for letting the extinguishing agent in and/or out. Moreover, the inlet (22) of the adding pump (20) can be arranged such that the extinguishing agent additive can flow into the adding pump substantially parallel to the movement direction (27, 28, 29) of the pistons (24, 25, 26) of the adding pump (20). Finally, the adding pump (20) can have an integrated relief valve (30).

Abstract (de)

Die Erfindung betrifft ein Zumischsystem für Feuerlöschanlagen zur Erzeugung eines Löschmittel-Löschmitteladditiv-Gemisches (Premix) durch Zumischen eines Löschmitteladditivs, insbesondere eines Schaummittels, zu einem Löschmittel, insbesondere Wasser, mit einem von dem Löschmittelstrom antreibbaren Motor (1), einer von dem Motor (1) antreibbaren Zumischpumpe (20), einer Zumischleitung und einer Löschmitteladditivleitung. Um bei einem solchen Zumischsystem die Betriebssicherheit zu erhöhen, wird vorgeschlagen, dass die Wand des Drainagegehäuses (5) des als Rotationsmotor ausgestalteten Motors (1) einen Durchgangsschlitz (12, 13) zum Einlass und/oder Auslass des Löschmittels aufweist.

IPC 8 full level

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CPC (source: CN EP US)

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Citation (applicant)

- EP 0647458 A1 19950412 - ROSENBAUER INT AG [AT]
- KR 200378222 Y1 20050311
- US 2347944 A 19440502 - ELBERT FOWLER
- US 5402569 A 19950404 - MAKI BRUCE A [US], et al

Citation (search report)

- [YD] EP 0647458 A1 19950412 - ROSENBAUER INT AG [AT]
- [YD] KR 200378222 Y1 20050311
- [YD] US 2347944 A 19440502 - ELBERT FOWLER
- [YD] US 5402569 A 19950404 - MAKI BRUCE A [US], et al

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