

Title (en)  
Method for optimising a fire-extinguishing apparatus in respect of the consumption of the fire-extinguishing substance and/or extinguishing time

Title (de)  
Verfahren zur Optimierung einer Löschvorrichtung in bezug auf den Löschmittelverbrauch und/oder die Löszeit

Title (fr)  
Procédé pour optimiser un dispositif d'extinction d'incendies relativement à la consommation de la substance d'extinction de feu et/ou au temps d'extinction

Publication  
**EP 0661081 B1 20010718 (DE)**

Application  
**EP 94119613 A 19941212**

Priority  
CH 384393 A 19931223

Abstract (en)  
[origin: EP0661081A1] To optimise the extinguishing time and the consumption of the extinguishing water for a complete extinguishing of any fire, the extinguishing parameters for an extinguishing apparatus and the extinguishing method are determined using the methods of thermodynamics and fluid mechanics. Firstly, the development of the burning gas stream and the behaviour of water droplets emerging from a nozzle into this gas stream are determined. By means of the knowledge of the relationships between water droplet velocity, size and evaporation, the properties of the water droplets which are necessary for extinguishing can be calculated. The installation parameters of pressure, water throughput and pipework dimensions are then adapted in such a way that the desired water droplets are produced. <IMAGE>

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**A62C 39/00**; **A62C 35/62**

IPC 8 full level  
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CPC (source: EP)  
**A62C 35/62** (2013.01); **A62C 99/0072** (2013.01)

Citation (examination)  
• US 3684019 A 19720815 - EMMONS HOWARD W, et al  
• GB 2060071 A 19810429 - SUGIMURA N, et al

Cited by  
EP1142611A1; WO9800201A1; DE19627353C1; CN111274684A; FR2770781A1; SG104265A1; US5899277A; US6047777A; CN106644847A; EP4295923A1; WO9612526A1

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