

Title (en)  
SMOKE GENERATOR USING DRY ICE

Title (de)  
RAUCHERZEUGER UNTER VERWENDUNG VON TROCKENEIS

Title (fr)  
GÉNÉRATEUR DE FUMÉE UTILISANT DE LA GLACE SÈCHE

Publication  
**EP 4074392 A1 20221019 (EN)**

Application  
**EP 22171559 A 20210616**

Priority  
• CN 202010819141 A 20200814  
• CN 202021702139 U 20200814  
• EP 21179737 A 20210616

Abstract (en)  
A smoke generator includes a casing having a first chamber receiving dry ice, a second chamber receiving water, and a third chamber. The casing includes an outer side having a smoke outlet intercommunicating with the second chamber. The first chamber includes a smoke discharge port intercommunicating with the second chamber. A water pump device in the third compartment includes a water inlet located in the second chamber and a water spraying end located in the first chamber. The water pump device delivers water in the second chamber to the first chamber. The dry ice contacts with the water and gasifies into smoke that enters the second chamber via the smoke discharge port and is then ejected out via the smoke outlet. Water in the first chamber is flowable back to the second chamber. A heater is disposed in the second chamber and can increase the temperature of the water.

IPC 8 full level  
**A63J 5/02** (2006.01)

CPC (source: EP)  
**A63J 5/025** (2013.01)

Citation (search report)  
• [A] CN 108721917 A 20181102 - GUANGZHOU CHUANGWEI LIGHTING LAMPS CO LTD  
• [A] CN 111437616 A 20200724 - HUNAN SHOWVEN ELECTRONIC TECH CO LTD  
• [A] CN 110624262 A 20191231 - HUNAN SHOWVEN ELECTRONIC TECH CO LTD  
• [A] CN 107320981 A 20171107 - GUANGZHOU DJPOWER ELECT TECH CO LTD  
• [A] DE 29905966 U1 19990715 - REYL [DE]

Designated contracting state (EPC)  
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Designated extension state (EPC)  
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**EP 3954447 A2 20220216**; **EP 3954447 A3 20220330**; EP 4074392 A1 20221019; EP 4074392 B1 20230726; EP 4074392 C0 20230726; ES 2955516 T3 20231204

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