

Title (en)  
FILTER STRUCTURE OF IGNITER

Title (de)  
FILTERSTRUKTUR FÜR ZÜNDER

Title (fr)  
STRUCTURE DE FILTRE D'ALLUMEUR

Publication  
**EP 1533570 A4 20080521 (EN)**

Application  
**EP 03728068 A 20030514**

Priority  
• JP 0305978 W 20030514  
• JP 2002145958 A 20020521

Abstract (en)  
[origin: EP1533570A1] A filter structure for an ignitor is provided, in which a flame length is kept uniform by ensuring constant gas permeability and ease of assembly of the filter is achieved. When causing ejection and combustion of fuel gas, which is contained in a tank chamber (24), out of a discharge nozzle (3) via a filter (71) which serves to keep the gas passage rate flowing therethrough constant and a valve mechanism (4) for starting and stopping feeding of the gas, the filter (71) is made of a membrane film (71a), which has pores and serves to keep the passage rate of the gas flowing therethrough constant; and a permeable porous body (71b) placed on the membrane film. A filter component (7) for affixing the filter (71) to the holder (72) is assembled on the upstream side of the valve mechanism (4). The holder (72) has a centrally formed vent hole (72c), the filter (71) is welded to the holder along the peripheral edge of the vent hole (72c), and the membrane (71a) and porous body (71b) of the filter are not joined together within the region corresponding to the region within the vent hole (72c) of the holder. <IMAGE>

IPC 8 full level  
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CPC (source: EP US)  
**F23Q 2/173** (2013.01 - EP US); **F23Q 2/287** (2013.01 - EP US); **F23Q 2/34** (2013.01 - EP US)

Citation (search report)  
• [XY] US 4929175 A 19900529 - NITTA TOMIO [JP]  
• [Y] US 4906179 A 19900306 - NITTA TOMIO [JP]  
• [Y] US 5490777 A 19960213 - MATSUMOTO TADAHISA [JP]  
• [A] US 4478570 A 19841023 - JOHANSSON STIG [SE]  
• See references of WO 03098112A1

Cited by  
US10215409B2; WO2014057300A1

Designated contracting state (EPC)  
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**EP 1533570 A1 20050525**; **EP 1533570 A4 20080521**; AU 2003234801 A1 20031202; CN 100385171 C 20080430; CN 1656342 A 20050817; JP 2003336840 A 20031128; JP 3867851 B2 20070117; US 2005175947 A1 20050811; WO 03098112 A1 20031127

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