

Title (en)  
INTERNAL COMBUSTION ENGINE SILENCER DEVICE

Title (de)  
SCHALLDÄMPFERVORRICHTUNG FÜR BRENNKRAFTMASCHINE

Title (fr)  
DISPOSITIF DE SILENCIEUX POUR MOTEURS A EXPLOSION

Publication  
**EP 0781372 B1 20031001 (FR)**

Application  
**EP 96925789 A 19960716**

Priority  
• FR 9601098 W 19960716  
• FR 9508838 A 19950717

Abstract (en)  
[origin: FR2736966A1] A device that is simple to manufacture and uses austenitic stainless steel components is disclosed. The device consists of a nozzle (1) comprising a cone and a cylinder made of a single perforated sheet of metal with alternating holes of different diameters along the whole length thereof. The outer shell consists of a cylindrical and optionally tapered front portion (2), and a tapered rear end portion (3) ending in an angled trailing edge gas exhaust tube. This geometrical arrangement increases the available volume and accelerates the flow without generating back pressure. The space between the nozzle and the outer shell is filled with austenitic stainless steel wool (4). The device not only substantially reduces noise levels relative to existing systems, but is also easy to install, remove and maintain and has improved durability.

IPC 1-7  
**F01N 1/24**; **F01N 1/08**; **F01N 7/16**

IPC 8 full level  
**F01N 1/24** (2006.01); **F01N 13/16** (2010.01)

CPC (source: EP US)  
**F01N 1/24** (2013.01 - EP US); **F01N 13/16** (2013.01 - EP US); **F01N 2310/04** (2013.01 - EP US)

Citation (examination)  
US 5020631 A 19910604 - DEVILLE PAUL [FR]

Cited by  
DE102009013222B3

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DOCDB simple family (publication)  
**US 5902970 A 19990511**; AT E251270 T1 20031015; AU 6617796 A 19970218; AU 722523 B2 20000803; CA 2200078 A1 19970314; DE 69630190 D1 20031106; DE 69630190 T2 20040701; EP 0781372 A1 19970702; EP 0781372 B1 20031001; ES 2208756 T3 20040616; FR 2736966 A1 19970124; FR 2736966 B1 19971017; WO 9704220 A1 19970206

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**US 80995197 A 19970417**; AT 96925789 T 19960716; AU 6617796 A 19960716; CA 2200078 A 19960716; DE 69630190 T 19960716; EP 96925789 A 19960716; ES 96925789 T 19960716; FR 9508838 A 19950717; FR 9601098 W 19960716