

Title (en)  
Acoustic device

Title (de)  
Akustische Einrichtung

Title (fr)  
Objet acoustique

Publication  
**EP 1519617 A3 20060322 (EN)**

Application  
**EP 04255080 A 20040824**

Priority  
JP 2003333523 A 20030925

Abstract (en)  
[origin: EP1519617A2] An acoustic device (400), which is mounted on an instrument panel (100) with a built-in reinforcement (410) having a hollow portion, comprises speaker mounting members (420L and 420R), each having a hollow portion, a base end of which is communicated with the reinforcement (410), and speakers (430L and 430R) disposed in the openings at the front end side of the speaker mounting members (420L and 420R), which emit sounds outside the instrument panel (100). It is arranged so that the hollow portions of the reinforcement (410) and the hollow portions of the speaker mounting members (420L and 420R) function as the resonant sections for allowing the sounds emitted by the speakers (430L and 430R) to resonate.

IPC 8 full level  
**B60R 11/02** (2006.01); **H04R 1/28** (2006.01); **H04R 1/02** (2006.01); **H04R 5/02** (2006.01)

CPC (source: EP)  
**H04R 1/2819** (2013.01); **H04R 5/02** (2013.01); **H04R 2499/13** (2013.01)

Citation (search report)

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- [X] US 5576522 A 19961119 - TASO YE M [TW]
- [A] US 5197103 A 19930323 - HAYAKAWA JUNICHI [JP]
- [X] PATENT ABSTRACTS OF JAPAN vol. 017, no. 097 (E - 1326) 25 February 1993 (1993-02-25)
- [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 155 (E - 1524) 15 March 1994 (1994-03-15)

Cited by  
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AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1519617 A2 20050330; EP 1519617 A3 20060322; CN 1602113 A 20050330; JP 2005096630 A 20050414**

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**EP 04255080 A 20040824; CN 200410080173 A 20040924; JP 2003333523 A 20030925**