

Title (en)
SOUND-INSULATING GLAZING WITH THERMOVISCOUS LOSSES

Title (de)
SCHALLISOLIERENDE VERGLASUNG MIT THERMOVISKOSEN VERLUSTEN

Title (fr)
VITRAGE ISOLANT ACOUSTIQUE A EFFET DE PERTES THERMO-VISQUEUSES

Publication
EP 1521895 A1 20050413 (FR)

Application
EP 03753633 A 20030709

Priority

- FR 0302138 W 20030709
- FR 0208937 A 20020715

Abstract (en)
[origin: WO2004007886A1] The invention relates to sound-insulating glazing comprising at least two sheets of substrate (2, 3) which are assembled at the periphery thereof using a device (4) forming a sealed joint and a spacer frame which, together with the two sheets of substrate (2, 3), forms a flat gas-filled cavity (5). The invention is characterised in that at least one micro-cavity (5a, 5b) is formed on at least one part of the edge of the aforementioned gas-filled cavity (5), thereby forming an area of thermoviscous losses from the cavity (5) along at least one of the inner walls of the two sheets of substrate (2, 3) defining said cavity (5). The dimensions of the micro-cavity (5a, 5b) are selected so as to encourage the propagation of part of the acoustic waves from the cavity (5) towards the micro-cavity, thus producing thermoviscous losses and reducing the acoustic energy of said cavity. In addition, means (6e) are provided in order to contain the acoustic waves leaving said micro-cavity (5a, 5b).

IPC 1-7
E06B 3/66

IPC 8 full level
C03C 27/06 (2006.01); **E04B 1/82** (2006.01); **E06B 3/66** (2006.01); **E06B 3/67** (2006.01)

CPC (source: EP KR US)
E06B 3/6612 (2013.01 - KR); **E06B 3/6707** (2013.01 - EP KR US)

Citation (search report)
See references of WO 2004007886A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
FR 2842242 A1 20040116; **FR 2842242 B1 20041217**; AU 2003271798 A1 20040202; BR 0312018 A 20050322; CN 100439647 C 20081203; CN 1668825 A 20050914; EP 1521895 A1 20050413; JP 2005533204 A 20051104; KR 20050025599 A 20050314; US 2006162280 A1 20060727; US 7537813 B2 20090526; WO 2004007886 A1 20040122

DOCDB simple family (application)
FR 0208937 A 20020715; AU 2003271798 A 20030709; BR 0312018 A 20030709; CN 03816790 A 20030709; EP 03753633 A 20030709; FR 0302138 W 20030709; JP 2004520744 A 20030709; KR 20057000657 A 20050113; US 52051405 A 20050922