

Title (en)
CLOTH EXHIBITING ACOUSTIC ABSORPTION

Title (de)
STOFF MIT SCHALLDÄMPFUNG

Title (fr)
TISSU PRÉSENTANT UNE ABSORPTION ACOUSTIQUE

Publication
EP 1865096 A4 20120815 (EN)

Application
EP 06730894 A 20060331

Priority
• JP 2006306946 W 20060331
• JP 2005105255 A 20050331

Abstract (en)
[origin: EP1865096A1] In order to provide a fabric that is lightweight and having sufficient sound-absorption performance, a sound absorbing fabric is three-dimensional and formed of a pair of base fabrics interconnected by connecting yarns; a sound-entrance base fabric has openings (4) in a mesh-work arrangement and non-opening parts; such non-opening part (5) is formed in a dome shape having a curvature (1/R) of 0.1 to 0.7 when radius of the curvature is represented as "R" mm; thickness dimension of the non-opening part (5) from its peak to bottom fringe is 1.5 to 5.0 mm; "DV" value obtained by formula [1] below is 5 to 120; and inlay yarns (6) are knit-wise attached on inner face of non-sound-entrance base fabric (2).
$$DV = 4.2 \times \bar{A} \times A \times W \times c^1 / c$$

A: thickness dimension (mm) of the non-opening part; W: course-direction-wise dimension (mm) of the non-opening part; c¹: number of loops per one repeat in wale direction, on the non-opening part; c: course density (number of courses/inch) at completion, of the sound absorbing fabric.

IPC 8 full level
D04B 21/14 (2006.01)

CPC (source: EP)
D04B 21/20 (2013.01); **D10B 2403/0223** (2013.01)

Citation (search report)
• [A] US 2003101776 A1 20030605 - SHIRASAKI FUMIO [JP], et al
• See references of WO 2006106974A1

Cited by
EP4350062A4

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

DOCDB simple family (publication)
EP 1865096 A1 20071212; EP 1865096 A4 20120815; EP 1865096 B1 20141203; CN 101098993 A 20080102; JP 4478182 B2 20100609; JP WO2006106974 A1 20080925; WO 2006106974 A1 20061012

DOCDB simple family (application)
EP 06730894 A 20060331; CN 200680001666 A 20060331; JP 2006306946 W 20060331; JP 2007511206 A 20060331