

Title (en)
Filled air sealing body

Title (de)
Mit Luft gefüllter Dichtkörper

Title (fr)
Corps étanche rempli d'air

Publication
EP 2072418 A1 20090624 (EN)

Application
EP 07400031 A 20071218

Priority
EP 07400031 A 20071218

Abstract (en)
An air sealing body capable of intensifying air-tightness comprises two outer membranes (2a,2b) and two inner membranes (1a,1b). At least a heat resistant section (1c) is formed between the inner membranes by means of coated heat resistant material. Four sides of the two outer membranes are thermally sealed and an air filling passage (9), an air inlet (2e) and an air column (11) are thermally formed to across the heat resistant section. The heat resistant section is further thermally sealed with the thermal seal spots (2c). Hence, a structure with the air inlet being forcedly opened during air being filled is constituted and a curved surface zone (11a) is formed at the air column near the air filling side. Multiple wrinkles are produced between the inner membranes. A column zone (11b) is disposed at a side of the curved surface zone. At least a ring-shaped thermal seal line (3f) is attached to at least the inner membranes and disposed next to the column surface zone and outside the curved surface zone. At least a second inlet (2f) is thermally formed between the inner membranes and disposed at the intersection of the heat resistant section and the ring-shaped thermal seal line to communicate both sides of the thermal seal line. The inner membranes is attached to one of the outer membranes after the air being filled with the wrinkles being interrupted by the thermal seal line of the second inlet to perform blocking the air effectively.

IPC 8 full level
B65D 81/05 (2006.01)

CPC (source: EP)
B65D 81/052 (2013.01)

Citation (applicant)
• TW 587049 B 20040511 - KASHIWABARA SEITAI KK [JP], et al
• US 2007267094 A1 20071122 - LIAO CHIAN H [TW], et al

Citation (search report)
• [A] US 2007267094 A1 20071122 - LIAO CHIAN H [TW], et al
• [A] JP 2005162269 A 20050623 - MATSUSHITA ELECTRIC IND CO LTD
• [A] WO 9304947 A1 19930318 - SHINWA CORP KK [JP]
• [A] FR 2291114 A2 19760611 - NORMOS NORBERT [FR]

Cited by
CN105883210A; CN110963167A

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 MT NL PL PT RO SE SI SK TR

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