

Title (en)

SOUND INSULATING AND THERMAL INSULATING MASONRY WITH AN INSULATION CORE

Title (de)

SCHALLDÄMMENDES UND WÄRMEDÄMMENDES MAUERWERK MIT EINEM ISOLATIONSKERN

Title (fr)

MAÇONNERIE ISOLANTE PHONIQUE ET THERMIQUE DOTÉE D'UNE PARTIE CENTRALE ISOLANTE

Publication

**EP 4022143 A4 20230816 (EN)**

Application

**EP 20859418 A 20200830**

Priority

- PL 43099719 A 20190830
- PL 2020050059 W 20200830

Abstract (en)

[origin: WO2021040550A1] A sound insulating and thermal insulating masonry block comprising a continuous supporting member bonded by interlocking and adhesion with a continuous thermal insulation core, in its cross-section parallel to the base of the masonry block comprising at least two walls of the supporting structure (4) and (5) and at least one insulating material layer (3) separating the supporting member at the entire length of the masonry block, wherein the insulating material layers in contact with the top surface of the masonry block form a different shape than the insulating material layers in contact with the bottom surface of the masonry block, at the entire masonry block height, said masonry block comprises a top part (1) including the insulating material in contact with the top surface of the masonry block and a bottom part (2) including the insulating material in contact with the bottom surface of the masonry block, and in the cross- sections perpendicular to the end surfaces of the masonry block, the insulating material layers, at least 20% of the masonry block length are formed in such a way that when the insulating material layer in contact with the top surface of the masonry block is closer to the first end surface of the masonry block, the insulating material layer in contact with the bottom part of the masonry block is closer to the second end surface of the masonry block, at least a single wall of the supporting member in the first horizontal part adjoins at least two walls of the supporting member in the adjacent second horizontal part; if the masonry block in its top part and its bottom part includes a single insulating material layer, the maximum width of the insulating material layer is 30% of the width of the masonry block; if the masonry blocks includes at least two insulating material layers (13 and 14), at least one of said layers separates the supporting member at the entire length of the masonry block, and an internal wall of the supporting member is formed between the layers of the insulating material (15), wherein at least one of the insulating material layers in the top part of the masonry block, as viewed from the top, partially overlaps at least two layers of the insulating material at the bottom part of the masonry block, and each wall of the supporting member of the first horizontal part is in contact with at least two walls of the supporting member adjacent to the second horizontal part.

IPC 8 full level

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CPC (source: EP)

**E04C 1/41** (2013.01); **E04C 1/40** (2013.01)

Citation (search report)

- [A] PL 181846 B1 20010928 - TRZASKOMA WITOLD [PL], et al
- [A] CN 209308260 U 20190827 - SHANDONG TIANYU BUILDING MATERIALS TECH CORP LTD
- [A] EP 1726732 A1 20061129 - PRZED PROD HANDLOWO USLUGOWE J [PL]
- See references of WO 2021040550A1

Designated contracting state (EPC)

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