

Title (en)

BALLISTIC RESISTANT INSULATED GLAZING UNITS

Title (de)

BESCHUSSSICHERE ISOLIERVERGLASUNGSEINHEITEN

Title (fr)

VITRAGES ISOLANTS ANTIBALLES

Publication

EP 3853019 A1 20210728 (EN)

Application

EP 19773409 A 20190919

Priority

- EP 18195555 A 20180919
- EP 2019075234 W 20190919

Abstract (en)

[origin: WO2020058439A1] The present invention discloses an insulated glazing unit configured for resisting to a projectile (6) with an kinetic impact energy, E, comprised between 1750 J and 1850 J, extending along a plane, P, defined by a longitudinal axis, x, and a vertical axis, y, comprising a front laminated pane, F, facing the projectile, having a total thickness, ZF, and comprising m glass sheets, f, each having a sheet thickness, Zf, bonded by m-1 polymer interlayers, fi, each having a polymer thickness, Zfi, wherein m is a positive integer greater than or equal to 2 ($m \geq 2$), a back laminated pane B, having a total thickness, ZB, comprising at least n glass sheets, each having a sheet thickness, Zb, bonded by n-1 polymer interlayers, bi, each having a polymer thickness, Zbi, wherein n is a positive integer greater than or equal to 2 and a spacer, S, maintaining a distance, D, between the front laminated pane F and the back laminated pane, B; wherein the thicknesses are measured in the direction normal to the plane, P, in the axis, z, wherein the total thickness of the front laminated pane, ZF, equals the sum of the thicknesses of the m glass sheets and the m-1 polymer interlayers, and wherein the total thickness of the back laminated pane, ZB, equals the sum of the thicknesses of the n glass sheets and the n-1 polymer interlayers wherein $ZB \leq 1/3*(ZF + ZB)$ and at least 2 glass sheets of the back laminated pane (B) are tempered.

IPC 8 full level

B32B 17/10 (2006.01); **E06B 3/67** (2006.01); **F41H 5/04** (2006.01)

CPC (source: EP)

B32B 17/10055 (2013.01); **B32B 17/10091** (2013.01); **B32B 17/10137** (2013.01); **B32B 17/10174** (2013.01); **B32B 17/10761** (2013.01);
B32B 17/1077 (2013.01); **B32B 17/10788** (2013.01); **E06B 3/67** (2013.01); **F41H 5/0407** (2013.01)

Citation (search report)

See references of WO 2020058439A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2020058439 A1 20200326; EP 3853019 A1 20210728

DOCDB simple family (application)

EP 2019075234 W 20190919; EP 19773409 A 20190919