

Title (en)
SINTERED ALUMINA-ZIRCONIA BALLS

Title (de)
GESINTERTE ALUMINIUMOXID-ZIRKONIUMOXID-KUGELN

Title (fr)
BILLES FRITTEES D'ALUMINE-ZIRCONE

Publication
EP 3911617 A1 20211124 (FR)

Application
EP 20701934 A 20200117

Priority
• FR 1900449 A 20190118
• EP 2020051178 W 20200117

Abstract (en)
[origin: WO2020148446A1] A sintered ball having: - the following crystallographic composition, in mass percentages on the basis of the total mass of the crystallised phases and for a total of 100%: - zircon < 25%; - 50% ≤ cubic zirconia + quadratic zirconia ≤ 95%, the cubic zirconia content being greater than 50%, the cubic zirconia content being the mass ratio (cubic zirconia / (cubic zirconia + quadratic zirconia)); - 0 ≤ monoclinic zirconia ≤ (10 - 0.2* quadratic zirconia)%; - 5% ≤ corindon ≤ 50%; - crystallised phases other than zircon, cubic zirconia, quadratic zirconia, monoclinic zirconia and corindon < 10%; - the following chemical composition, in mass percentages on the basis of oxides: 34% ≤ ZrO₂ + HfO₂, ZrO₂ + HfO₂ being the complement to form 100%; HfO₂ ≤ 4.0%; 0.5% ≤ SiO₂ ≤ 14.1%; 4.5% ≤ Al₂O₃ ≤ 49.6%; 2.75% ≤ Y₂O₃ ≤ 22.8%; MgO ≤ 5%; CaO ≤ 2%; oxides other than ZrO₂, HfO₂, SiO₂, Al₂O₃, MgO, CaO and Y₂O₃ < 5.0%.

IPC 8 full level
C04B 35/488 (2006.01); **B02C 17/20** (2006.01)

CPC (source: EP KR US)
B02C 17/20 (2013.01 - EP KR); **C04B 35/4885** (2013.01 - EP KR US); **C04B 2235/3206** (2013.01 - EP KR);
C04B 2235/3208 (2013.01 - EP KR US); **C04B 2235/3217** (2013.01 - US); **C04B 2235/3225** (2013.01 - EP KR US);
C04B 2235/3244 (2013.01 - US); **C04B 2235/3248** (2013.01 - EP KR); **C04B 2235/3418** (2013.01 - EP KR US);
C04B 2235/3481 (2013.01 - EP KR); **C04B 2235/349** (2013.01 - EP KR); **C04B 2235/36** (2013.01 - EP KR); **C04B 2235/5296** (2013.01 - EP KR);
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C04B 2235/6023 (2013.01 - EP KR); **C04B 2235/6562** (2013.01 - EP KR); **C04B 2235/6567** (2013.01 - EP KR); **C04B 2235/76** (2013.01 - EP KR);
C04B 2235/762 (2013.01 - EP KR US); **C04B 2235/765** (2013.01 - EP KR US); **C04B 2235/77** (2013.01 - EP KR);
C04B 2235/94 (2013.01 - EP KR); **C04B 2235/96** (2013.01 - EP KR)

Citation (search report)
See references of WO 2020148446A1

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

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KR 20210113664 A 20210916; US 2022153650 A1 20220519

DOCDB simple family (application)
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KR 20217025590 A 20200117; US 202017423431 A 20200117