

Title (en)
METHOD FOR SINTERING CERAMIC MATERIALS

Title (de)
VERFAHREN ZUM SINTERN KERAMISCHER WERKSTOFFE

Title (fr)
PROCÉDÉ DE FRITTAGE DE MATÉRIAUX CÉRAMIQUES

Publication
EP 4237245 A1 20230906 (DE)

Application
EP 21777987 A 20210913

Priority
• DE 102020213680 A 20201030
• EP 2021075118 W 20210913

Abstract (en)
[origin: WO2022089823A1] The invention relates to a method for producing a compacted component and to an article which comprises a compacted component. In a method for producing a compacted component (10), a starting material (20) at a temperature (T) below 800 °C is exposed to an electric field (12). The starting material (20) comprises a first material (14) from the group of cuprates. The method is technically undemanding because compacting is possible without the starting material being heated.

IPC 8 full level
B32B 18/00 (2006.01); **C04B 35/45** (2006.01); **C04B 37/02** (2006.01)

CPC (source: EP US)
B32B 18/00 (2013.01 - EP); **C04B 35/45** (2013.01 - EP US); **C04B 35/64** (2013.01 - US); **C04B 37/02** (2013.01 - EP); **H01K 1/04** (2013.01 - US); **C04B 2235/3217** (2013.01 - EP US); **C04B 2235/3282** (2013.01 - US); **C04B 2235/6567** (2013.01 - EP US); **C04B 2235/6581** (2013.01 - EP); **C04B 2235/666** (2013.01 - EP US); **C04B 2235/785** (2013.01 - US); **C04B 2235/786** (2013.01 - US)

Citation (examination)
• WO 2010066359 A1 20100617 - UMICORE NV [BE], et al
• CN 110204328 A 20190906 - UNIV SOUTHWEST JIAOTONG
• US 4975414 A 19901204 - MEEKS HENRY S [US], et al
• EP 0358049 A2 19900314 - GEN ELECTRIC [US]
• US 5102863 A 19920407 - CASS RICHARD B [US], et al
• CN 111056835 A 20200424 - UNIV ZHEJIANG
• LEBRAT J P ET AL: "Combustion synthesis of the YBa₂Cu₃O_{7-x} superconductor", PHYSICA C, NORTH-HOLLAND PUBLISHING, AMSTERDAM, NL, vol. 184, no. 4-6, 15 December 1991 (1991-12-15), pages 220 - 228, XP025205204, ISSN: 0921-4534, [retrieved on 19911215], DOI: 10.1016/0921-4534(91)90386-D
• See also references of WO 2022089823A1

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2022089823 A1 20220505; DE 102020213680 A1 20220505; EP 4237245 A1 20230906; US 2023382807 A1 20231130

DOCDB simple family (application)
EP 2021075118 W 20210913; DE 102020213680 A 20201030; EP 21777987 A 20210913; US 202118032719 A 20210913