

Title (en)  
COLORED ZIRCONIA

Title (de)  
GEFÄRBTES ZIRKONIA

Title (fr)  
ZIRCONE COLOREE

Publication  
**EP 4126792 A1 20230208 (FR)**

Application  
**EP 21716204 A 20210402**

Priority  

- FR 2003343 A 20200403
- EP 2021058814 W 20210402

Abstract (en)  
[origin: WO2021198519A1] A particulate mixture having the following chemical composition, by weight percentages on the basis of the oxides: - ZrO<sub>2</sub> + HfO<sub>2</sub> + Y<sub>2</sub>O<sub>3</sub> + CeO<sub>2</sub> : the remainder to 100%; - 0% ≤ Al<sub>2</sub>O<sub>3</sub> ≤ 1.5%; - oxides other than ZrO<sub>2</sub>, HfO<sub>2</sub>, Y<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub>, or "other oxides": between 0.5% and 12%; HfO<sub>2</sub>, Y<sub>2</sub>O<sub>3</sub> and CeO<sub>2</sub>, being such that - 1.8% ≤ Y<sub>2</sub>O<sub>3</sub> ≤ 3% and - 0.1% ≤ CeO<sub>2</sub> ≤ 0.9%, the particulate mixture comprising between 0.5% and 10% of an oxide pigment, as weight percentage on the basis of the particulate mixture, wherein the content of oxides which are "other oxides" and which are not included in the oxide pigment is less than 2%, as weight percentage on the basis of the oxides, more than 95% of the weight of the oxide pigment particles consisting of a material chosen from: - oxide(s) of perovskite structure, optionally totally or partially replaced with an equivalent amount of precursor(s) of these oxides, - oxides of spinel structure, optionally totally or partially replaced with an equivalent amount of precursor(s) of these oxides, - oxides of hematite structure E<sub>2</sub>O<sub>3</sub>, the element E being chosen from the group GE(1) formed by iron, chromium and mixtures of iron and chromium, - oxides of rutile structure F<sub>2</sub>O<sub>3</sub>, the element F being chosen from the group GF(1) formed by mixtures of tin and vanadium, mixtures of titanium and chromium and niobium, mixtures of titanium and chromium and tungsten, mixtures of titanium and niobium and manganese, mixtures of tin and chromium, mixtures of chromium and titanium and antimony, mixtures of nickel and antimony and titanium, and mixtures thereof, - and mixtures thereof.

IPC 8 full level  
**C04B 35/486** (2006.01); **C04B 35/488** (2006.01); **G04B 37/22** (2006.01)

CPC (source: EP US)  
**C04B 35/486** (2013.01 - EP); **C04B 35/488** (2013.01 - EP US); **C04B 35/62685** (2013.01 - EP); **C04B 35/64** (2013.01 - US);  
**G04B 37/22** (2013.01 - EP); **C04B 2235/3217** (2013.01 - EP); **C04B 2235/3218** (2013.01 - US); **C04B 2235/3225** (2013.01 - EP US);  
**C04B 2235/3229** (2013.01 - EP US); **C04B 2235/3232** (2013.01 - EP); **C04B 2235/3239** (2013.01 - EP); **C04B 2235/3241** (2013.01 - EP US);  
**C04B 2235/3246** (2013.01 - US); **C04B 2235/3251** (2013.01 - EP); **C04B 2235/3258** (2013.01 - EP); **C04B 2235/3262** (2013.01 - EP);  
**C04B 2235/3272** (2013.01 - EP US); **C04B 2235/3277** (2013.01 - EP US); **C04B 2235/3279** (2013.01 - EP); **C04B 2235/3281** (2013.01 - EP);  
**C04B 2235/3284** (2013.01 - EP); **C04B 2235/3293** (2013.01 - EP); **C04B 2235/3294** (2013.01 - EP); **C04B 2235/5427** (2013.01 - EP US);  
**C04B 2235/5436** (2013.01 - EP US); **C04B 2235/5445** (2013.01 - EP); **C04B 2235/5481** (2013.01 - EP US); **C04B 2235/656** (2013.01 - US);  
**C04B 2235/72** (2013.01 - EP); **C04B 2235/723** (2013.01 - US); **C04B 2235/76** (2013.01 - EP); **C04B 2235/763** (2013.01 - US);  
**C04B 2235/768** (2013.01 - US); **C04B 2235/77** (2013.01 - EP US); **C04B 2235/784** (2013.01 - EP); **C04B 2235/785** (2013.01 - EP US);  
**C04B 2235/786** (2013.01 - EP); **C04B 2235/96** (2013.01 - EP); **C04B 2235/9661** (2013.01 - EP US); **C04B 2235/9669** (2013.01 - EP US)

Citation (search report)  
See references of WO 2021198519A1

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)  
**FR 3108905 A1 20211008; FR 3108905 B1 20230407; CN 115697940 A 20230203; EP 4126792 A1 20230208; US 2023183137 A1 20230615;**  
WO 2021198519 A1 20211007

DOCDB simple family (application)  
**FR 2003343 A 20200403; CN 202180039493 A 20210402; EP 2021058814 W 20210402; EP 21716204 A 20210402;**  
US 202117916697 A 20210402