

Title (en)

METHOD FOR PRODUCING TRANSPARENT CERAMIC OBJECTS BY MEANS OF FLUIDISED BED GRANULATION

Title (de)

VERFAHREN ZUR HERSTELLUNG TRANSPARENTER KERAMIKGEGENSTÄNDE MITTELS WIRBELSCHICHTGRANULATION

Title (fr)

PROCÉDÉ POUR PRODUIRE DES OBJETS EN CÉRAMIQUE TRANSPARENTE PAR GRANULATION EN LIT FLUIDISÉ

Publication

EP 2776378 A1 20140917 (DE)

Application

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Priority

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Abstract (en)

[origin: WO2013068576A1] The invention relates to a method for producing transparent ceramic objects having an RIT > 10% in the wave length range of 300nm to 4000nm and a wall thickness of 2 mm. Said method consists of the following steps: producing a slip by dispersing a ceramic powder, the particle size of which is $d_{50} < 5\mu\text{m}$, preferably between 5nm and 500nm; producing a granular material, the particle size of which is $d_{50} < 1\text{mm}$, preferably between $50\mu\text{m}$ and $500\mu\text{m}$, more preferably between $80\mu\text{m}$ and $300\mu\text{m}$, from the slip by means of fluidised bed granulation; pressing the granular material in a simple, non-cyclical manner to form a green body; sintering the green body to form a sintered body; and re-densifying the sintered body.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2013068576A1

Citation (examination)

- DD 274980 A1 19900110 - LEUNA WERKE VEB [DD]
- WO 2013068418 A1 20130516 - CERAMTEC ETEC GMBH [DE], et al
- WO 2011077379 A1 20110630 - SAINT GOBAIN CT RECHERCHES, et al
- DE 19602525 A1 19970807 - STARCK H C GMBH CO KG [DE]

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