

## Title (en)

REDUCTION OF THE CARBON CONTENT OF SILICA GRANULATE, AND PRODUCTION OF A SILICA GLASS ARTICLE

## Title (de)

VERRINGERN DES KOHLENSTOFFGEGHALTS VON SILIZIUMDIOXIDGRANULAT UND HERSTELLUNG EINES QUARZGLASKÖRPERS

## Title (fr)

RÉDUCTION DE LA TENEUR EN CARBONE D'UN GRANULAT DE DIOXYDE DE SILICIUM ET FABRICATION D'UN CORPS DE VERRE DE SILICE

## Publication

**EP 3390307 A2 20181024 (DE)**

## Application

**EP 16822148 A 20161216**

## Priority

- EP 15201098 A 20151218
- EP 2016081520 W 20161216

## Abstract (en)

[origin: WO2017103167A2] The invention relates to a method for producing a silica glass article, involving method steps i.) providing a silica granulate, the providing involving at least the steps of: I. providing silica powder; and II. processing the silica powder so as to obtain a silica granulate, the silica granulate having a larger particle diameter than the silica powder, the processing involving the following steps: 1) processing the silica powder to obtain a silica granulate I that has a first carbon content w C(1), 2) treating silica granulate I with a reactant so as to obtain a silica granulate II having another carbon content, w C(2), which is lower than the first carbon content w C(1); ii.) forming a glass melt from the silica granulate, and iii.) forming a silica glass article from at least some of the glass melt. The invention further relates to a silica glass article that can be obtained by said method. The invention also relates to an optical waveguide, an illuminant and a molded article, each of which can be obtained by further processing the silica glass article. The invention finally relates to a silica granulate II that can be obtained as an intermediate product in the disclosed method.

## IPC 8 full level

**C03B 20/00** (2006.01); **C03B 17/04** (2006.01); **C03B 19/10** (2006.01); **C03B 37/012** (2006.01); **C03C 1/02** (2006.01); **C03C 3/06** (2006.01)

## CPC (source: EP US)

**C01B 33/181** (2013.01 - EP US); **C03B 17/04** (2013.01 - EP US); **C03B 19/106** (2013.01 - EP US); **C03B 19/1095** (2013.01 - EP US); **C03B 20/00** (2013.01 - US); **C03C 1/022** (2013.01 - EP US); **C03C 3/06** (2013.01 - EP US); **C03C 12/00** (2013.01 - EP US); **G02B 6/12** (2013.01 - US); **C01P 2004/51** (2013.01 - US); **C01P 2004/61** (2013.01 - US); **C01P 2006/10** (2013.01 - US); **C01P 2006/11** (2013.01 - US); **C01P 2006/12** (2013.01 - US); **C01P 2006/80** (2013.01 - US); **C03B 2201/07** (2013.01 - EP US); **C03B 2201/075** (2013.01 - EP US); **C03B 2207/32** (2013.01 - EP US); **C03B 2207/36** (2013.01 - EP US); **C03C 2201/02** (2013.01 - EP US); **C03C 2201/11** (2013.01 - EP US); **C03C 2201/26** (2013.01 - EP US); **C03C 2201/32** (2013.01 - EP US); **C03C 2201/54** (2013.01 - EP US); **C03C 2203/10** (2013.01 - EP US); **C03C 2203/40** (2013.01 - EP US); **C03C 2203/44** (2013.01 - EP US); **C03C 2203/50** (2013.01 - EP US); **G01N 21/412** (2013.01 - EP); **Y02P 40/57** (2015.11 - EP)

## 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 2017103167 A2 20170622**; **WO 2017103167 A3 20171123**; CN 108698886 A 20181023; EP 3390307 A2 20181024; JP 2019502631 A 20190131; JP 6912098 B2 20210728; TW 201733924 A 20171001; TW I764879 B 20220521; US 2019077672 A1 20190314

## DOCDB simple family (application)

**EP 2016081520 W 20161216**; CN 201680082012 A 20161216; EP 16822148 A 20161216; JP 2018530493 A 20161216; TW 105141758 A 20161216; US 201616062234 A 20161216