

Title (en)

HOLLOW CORE GRANULES, PRODUCTS INCORPORATING THE GRANULES, AND METHODS OF PREPARING THE GRANULES

Title (de)

HOHLKERNGRANULAT, PRODUKTE MIT DEM GRANULAT UND VERFAHREN ZUR HERSTELLUNG DES GRANULATS

Title (fr)

GRANULES À NOYAU CREUX, PRODUITS INCORPORANT LES GRANULES ET PROCÉDÉS DE PRÉPARATION DES GRANULES

Publication

**EP 4139040 A1 20230301 (EN)**

Application

**EP 21792978 A 20210423**

Priority

- US 202063014911 P 20200424
- US 2021028821 W 20210423

Abstract (en)

[origin: WO2021216986A1] The present disclosure relates to hollow core granules, products incorporating the hollow core granules, and methods of making the hollow core granules. The hollow core granules can comprise at least one wall surrounding a cavity that is devoid of any solid or liquid so as to define a hollow core, the at least one wall comprising a plurality of individual particles of at least one wall forming material, the plurality of individual particles sufficiently bound together so that the at least one wall is structurally self-sustaining. The hollow core granules further can include a binder material present in the at least one wall. The hollow core granules can be useful as a standalone material and/or may be useful in preparing a variety of products wherein the hollow core granules may be mixed or otherwise combined with further components. The disclosure further provides methods of making such hollow core granules.

IPC 8 full level

**B01J 13/12** (2006.01); **B01J 13/18** (2006.01); **B05D 3/02** (2006.01)

CPC (source: EP KR)

**A01K 1/0152** (2013.01 - EP); **A01K 1/0154** (2013.01 - EP); **A01K 1/0155** (2013.01 - EP); **A01N 25/12** (2013.01 - EP); **B01J 13/04** (2013.01 - EP KR); **B01J 20/043** (2013.01 - EP KR); **B01J 20/045** (2013.01 - EP KR); **B01J 20/046** (2013.01 - EP KR); **B01J 20/12** (2013.01 - EP KR); **B01J 20/165** (2013.01 - EP KR); **B01J 20/20** (2013.01 - EP KR); **B01J 20/28021** (2013.01 - EP KR); **B01J 20/2803** (2013.01 - EP KR); **B01J 20/3028** (2013.01 - EP KR); **B01J 20/3042** (2013.01 - EP KR); **B01J 20/3078** (2013.01 - EP KR); **B01J 20/3085** (2013.01 - EP KR); **C05G 5/00** (2020.02 - 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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**WO 2021216986 A1 20211028**; AU 2021259848 A1 20221110; AU 2021259848 B2 20240328; CA 3176359 A1 20211028; CN 115427141 A 20221202; EP 4139040 A1 20230301; EP 4139040 A4 20240313; JP 2023523251 A 20230602; KR 20220162185 A 20221207; MX 2022013345 A 20230301

DOCDB simple family (application)

**US 2021028821 W 20210423**; AU 2021259848 A 20210423; CA 3176359 A 20210423; CN 202180030083 A 20210423; EP 21792978 A 20210423; JP 2022564405 A 20210423; KR 20227040793 A 20210423; MX 2022013345 A 20210423