

Title (en)

CONSORTIA OF MICROORGANISMS FOR SPATIAL AND TEMPORAL DELIVERY OF NITROGEN

Title (de)

KONSORTIEN VON MIKROORGANISMEN ZUR RÄUMLICHEN UND ZEITLICHEN ZUFÜHRUNG VON STICKSTOFF

Title (fr)

CONSORTIUMS DE MICRO-ORGANISMES POUR UNE ADMINISTRATION SPATIALE ET TEMPORELLE D'AZOTE

Publication

**EP 4090642 A4 20240417 (EN)**

Application

**EP 21740778 A 20210112**

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- US 2020031201 W 20200501
- US 2021013120 W 20210112

Abstract (en)

[origin: WO2021146209A1] The present disclosure provides consortia of microbes that are functionally optimized for nitrogen fixation and deliver such to plants in a targeted, efficient, and environmentally sustainable manner. The microbes within the consortium differ in nutrient utilization, temporal occupation, oxygen adaptability, and/or spatial occupation, which enables the microbes to deliver nitrogen to a cereal plant in a spatially targeted (e.g. rhizospheric) and temporally targeted (e.g. during advantageous stages of plant's life cycle) manner. The present disclosure also provides methods of creating a synthetic composition of microbes and methods of using compositions of microbes to fix atmospheric nitrogen and deliver such to a crop.

IPC 8 full level

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CPC (source: EP)

**C05F 11/08** (2013.01); **Y02W 30/40** (2015.05)

Citation (search report)

- [XP] WO 2020014498 A1 20200116 - PIVOT BIO INC [US]
- [XI] WO 2019084342 A1 20190502 - PIVOT BIO INC [US]
- [XI] WO 2019084059 A2 20190502 - PIVOT BIO INC [US], et al
- [XI] WO 2018132774 A1 20180719 - PIVOT BIO INC [US]
- [XI] WO 2020006064 A2 20200102 - PIVOT BIO INC [US]
- [XI] WO 2020006246 A1 20200102 - PIVOT BIO INC [US]
- See also references of WO 2021146209A1

Designated contracting state (EPC)

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