

Title (en)

A PROCESS OF PRODUCING SOIL AMENDMENT FROM ORGANIC WASTE, AND A FERTILIZER PRODUCED FROM SAME

Title (de)

VERFAHREN ZUM PRODUZIEREN VON BODENVERBESSERUNGEN AUS ORGANISCHEN ABFÄLLEN UND EIN DARAUS PRODUZIERTES DÜNGEMITTEL

Title (fr)

PROCÉDÉ DE PRODUCTION D'AMENDEMENT DU SOL À PARTIR DE DÉCHETS ORGANIQUES ET ENGRAIS PRODUIT À PARTIR DE CELUI-CI

Publication

EP 4097070 A1 20221207 (EN)

Application

EP 21748252 A 20210127

Priority

- NO 20200096 A 20200127
- NO 2021050023 W 20210127

Abstract (en)

[origin: WO2021154088A1] A process of producing soil amendment from organic waste by feeding wet organic waste (101) with biochar (118) and wood (102) to form a feed mixture (106) to a composting drum (107) where The mixture is subjected to microbial aerobic conversion to produce a solid phase(108) comprising compost, biochar and water, and a gaseous phase(119) comprising humid air, CO₂ and ammonia. Moisture in solid phase(108) is removed in a dryer (109) to produce dry phase(110), which is fed to a separator (111) to extract structural material from compost. Compost in conduit (112) is fed to a mixer (113), and mixed with an aqueous solution (121) containing ammonia with scrubber (120) and composting drum (107) and other components to produce fertilizer(114). A pyrolysis reactor (123) converts structural material (101) and waste (102) to a gaseous phase and a carbonaceous solid phase (126) for use as carbon source in the fertilizer (114, 115).

IPC 8 full level

C05F 17/10 (2020.01)

CPC (source: EP NO)

C05C 1/02 (2013.01 - EP); **C05C 3/005** (2013.01 - EP); **C05F 3/06** (2013.01 - EP); **C05F 9/04** (2013.01 - EP); **C05F 11/02** (2013.01 - EP); **C05F 17/10** (2020.01 - EP NO); **C05F 17/40** (2020.01 - EP); **C05F 17/60** (2020.01 - EP); **C05F 17/90** (2020.01 - EP); **C05G 5/12** (2020.02 - EP); **Y02P 20/145** (2015.11 - EP NO); **Y02W 30/40** (2015.05 - EP NO)

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 2021154088 A1 20210805; EP 4097070 A1 20221207; EP 4097070 A4 20240306; NO 20220375 A1 20220329

DOCDB simple family (application)

NO 2021050023 W 20210127; EP 21748252 A 20210127; NO 20220375 A 20220329