

Title (en)
DUST COLLECTOR

Title (de)
STAUBABSCHEIDER

Title (fr)
COLLECTEUR DE POUSSIÈRE

Publication
EP 3991850 A4 20221102 (EN)

Application
EP 21760283 A 20210122

Priority
• JP 2020029347 A 20200225
• JP 2021002344 W 20210122

Abstract (en)
[origin: EP3991850A1] There is provided a dust collector including: a dust collection unit configured to trap particles; a microwave generation unit configured to generate a microwave to be introduced into the dust collection unit, and cause the particles, which are trapped in the dust collection unit, to combust by the microwave; and an intensity detection unit configured to detect an intensity of the microwave which is not absorbed by the particles, in which the microwave generation unit is configured to control the intensity of the microwave to be introduced into the dust collection unit, based on the intensity of the microwave detected by the intensity detection unit. The intensity detection unit may include a derivation unit configured to derive, from the dust collection unit, at least a part of the microwave which is not absorbed by the particles, a microwave absorbing body configured to absorb the microwave derived from the dust collection unit, and a temperature detection unit configured to detect a temperature of the microwave absorbing body.

IPC 8 full level
B03C 3/74 (2006.01)

CPC (source: CN EP KR)
B03C 3/04 (2013.01 - CN); **B03C 3/12** (2013.01 - EP); **B03C 3/34** (2013.01 - CN); **B03C 3/49** (2013.01 - EP); **B03C 3/68** (2013.01 - CN); **B03C 3/74** (2013.01 - EP KR); **B03C 2201/12** (2013.01 - EP); **B03C 2201/32** (2013.01 - EP)

Citation (search report)
• [X1] US 2018008925 A1 20180111 - IMADA TADAHIRO [JP], et al
• [X1] US 5423180 A 19950613 - NOBUE TOMOTAKA [JP], et al
• [A] JP 2011252387 A 20111215 - DENSO CORP
• [A] JP H05231127 A 19930907 - MATSUSHITA ELECTRIC IND CO LTD
• See references of WO 2021171856A1

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)
EP 3991850 A1 20220504; EP 3991850 A4 20221102; CN 114144260 A 20220304; JP 7243915 B2 20230322; JP WO2021171856 A1 20210902; KR 20220020991 A 20220221; WO 2021171856 A1 20210902

DOCDB simple family (application)
EP 21760283 A 20210122; CN 202180004674 A 20210122; JP 2021002344 W 20210122; JP 2022503166 A 20210122; KR 20227002830 A 20210122