

Title (en)

PAINT-CONVEYING, METERING AND MIXING APPARATUS FOR SPRAY GUNS

Title (de)

LACKFÖRDER-, DOSIER- UND MISCHVORRICHTUNG FÜR LACKIERPISTOLEN

Title (fr)

DISPOSITIF DE TRANSPORT, DE DOSAGE ET DE MÉLANGEAGE DE PEINTURE POUR PISTOLET À PEINTURE

Publication

EP 2802421 A1 20141119 (DE)

Application

EP 13700179 A 20130111

Priority

- EP 12151181 A 20120113
- US 201261586203 P 20120113
- EP 2013050511 W 20130111
- EP 13700179 A 20130111

Abstract (en)

[origin: WO2013104771A1] The invention relates to an apparatus for conveying, metering and mixing liquid paint components, comprising (a) a paint-feeding apparatus (A), which comprises two or more paint-supply containers (1) each with at least one outlet opening (14, 15) for different paint components which are to be mixed with one another; or comprises one paint-supply container (1) comprising two or more chambers (11, 12) for different paint components which are to be mixed with one another, wherein each chamber has at least one outlet opening (14, 15), (b) a metering apparatus (B), which is arranged downstream of the paint-feeding apparatus (A) and has a number of inlet openings (21, 22) for the paint components which corresponds to the number of outlet openings (14, 15) of the paint-supply containers or of the paint-supply container, wherein the metering apparatus is configured such that the volume flows of mixable paint components which enter via the inlet openings (21, 22) are forcibly conveyed separately from one another via rotating conveying devices (251/252, 261/262) serving as metering subassemblies, wherein the conveying devices are connected to one another such that their rotational speeds are fixed in relation to one another, and wherein the metering apparatus (B) have separate exit openings (23, 24) for the now metered volume flows of paint components, and (c) a static mixing apparatus (C), which is arranged downstream of the metering apparatus (B) and has a number of entry openings (31, 32) for the metered volume flows which corresponds to the number of exit openings (23, 24) of the metering apparatus, and the discharge of said mixing apparatus being designed such that it can be connected to a paint-spray gun. The invention also relates to a method for conveying, metering and mixing paint components using the apparatus according to the invention, to a metering apparatus and to a method for coating a substrate using the apparatus according to the invention in combination with a paint-spray gun.

IPC 8 full level

B05B 12/14 (2006.01); **B01F 3/08** (2006.01); **B01F 15/04** (2006.01)

CPC (source: EP US)

B01F 23/49 (2022.01 - US); **B01F 35/883** (2022.01 - US); **B05B 12/1445** (2013.01 - EP US); **B01F 2101/30** (2022.01 - US)

Citation (search report)

See references of WO 2013104771A1

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

DOCDB simple family (publication)

WO 2013104771 A1 20130718; EP 2802421 A1 20141119; EP 2802421 B1 20170315; ES 2631187 T3 20170829; US 2015036454 A1 20150205

DOCDB simple family (application)

EP 2013050511 W 20130111; EP 13700179 A 20130111; ES 13700179 T 20130111; US 201314371126 A 20130111