

Title (en)
METHOD AND PLANT FOR MANUFACTURING CERAMIC PRODUCTS

Title (de)
VERFAHREN UND ANLAGE ZUR HERSTELLUNG VON KERAMISCHEN PRODUKTEN

Title (fr)
PROCÉDÉ ET INSTALLATION POUR FABRIQUER DES PRODUITS CÉRAMIQUES

Publication
EP 4104990 A1 20221221 (EN)

Application
EP 22176124 A 20220530

Priority
IT 202100015521 A 20210615

Abstract (en)
A method for manufacturing ceramic products (T) is described, sequentially comprising the steps of: feeding a mixture of ceramic powders, micro metering the ceramic powders by means of a metering device (14), dispensing and depositing the powders on a transport device (18), accumulating and compacting the powders by means of an accumulation and compaction device (20), pressing the compacted ceramic powders (CL). The feeding step comprises a sub-step of feeding the ceramic powders along inclined feeding directions (A1, A2, A3), so as to relieve the vertical load of the powder weight on the metering device (14). The micro metering step comprises a sub-step of removal of any powders not meeting quality criteria. The dispensing and depositing step comprises a sub-step of separating the ceramic powders along a plurality of longitudinal channels, parallel to the feeding direction (B) of the transport device (18), to avoid dispersion by falling of the ceramic powders. This separation sub-step is implemented by a transport device (18) in the form of a conveyor belt whose surface comprises longitudinal protrusions (44) interspersed by longitudinal grooves (46). The accumulation and compaction step comprises a sub-step of dynamic variation of the accumulation and compaction direction (C) with respect to a substantially vertical plane, so as to control the formation of chromatic effects in the thickness of the compacted ceramic powders. A plant (10) for manufacturing ceramic products (T) by implementing the aforementioned method is also claimed.

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Citation (applicant)
• WO 2020058891 A1 20200326 - SCG BUILDING MAT CO LTD [TH]
• US 5056998 A 19911015 - GOOSSENS JOHANNES F H [NL]
• CN 109927161 A 20190625 - GUANGDONG QINGYUAN MONALISA BUILDING CERAM CO LTD, et al

Citation (search report)
• [AD] WO 2020058891 A1 20200326 - SCG BUILDING MAT CO LTD [TH]
• [AD] US 5056998 A 19911015 - GOOSSENS JOHANNES F H [NL]
• [AD] CN 109927161 A 20190625 - GUANGDONG QINGYUAN MONALISA BUILDING CERAM CO LTD, et al
• [A] EP 1787779 A2 20070523 - SACMI [IT]
• [A] IT RE20110080 A1 20130408 - ATIVA
• [A] CN 212312328 U 20210108 - ZHEJIANG GENGEN CERAM CO LTD
• [A] WO 0207939 A1 20020131 - LO SCALINO S R L [IT], et al

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