

Title (en)
COOLER AND YARN PROCESSOR

Title (de)
KÜHLER UND GARNPROZESSOR

Title (fr)
REFROIDISSEUR ET PROCESSEUR DE FILS

Publication
EP 4119707 A3 20230405 (EN)

Application
EP 22181535 A 20220628

Priority
JP 2021115543 A 20210713

Abstract (en)
Efficiency in cooling of a yarn is improved in a cooler that is configured to cool the yarn by cooling wind. A cooler 14 includes a cooling unit 31 in which a yarn running space S in which a yarn Y runs is formed and an intake duct 32 in which an intake space Ss connected to the yarn running space S is formed. The intake duct 32 includes a duct wall portion 34 in which one or more intake slit 38 is provided to extend in a unit longitudinal direction between the yarn running space S and the intake space Ss in a flow direction in which cooling wind flows. The cooling unit 31 includes paired unit wall plates 51 that are provided on one side of the duct wall portion 34 in the height direction. The paired unit wall plates 51 includes paired unit wall surfaces 55 which oppose each other in the width direction over the yarn running space S. The height in the height direction of each of the paired unit wall surfaces 55 is 30 mm or less.

IPC 8 full level
D02G 1/02 (2006.01); **D02J 13/00** (2006.01)

CPC (source: CN EP)
D01H 13/28 (2013.01 - CN); **D02G 1/0206** (2013.01 - CN); **D02G 1/0266** (2013.01 - EP); **D02J 13/001** (2013.01 - EP)

Citation (search report)
• [I] JP H11107084 A 19990420 - TORAY ENG CO LTD
• [A] JP 2016145429 A 20160812 - TMT MACHINERY INC
• [A] JP 2016056493 A 20160421 - TMT MACHINERY INC

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 4119707 A2 20230118; **EP 4119707 A3 20230405**; CN 115613174 A 20230117; JP 2023012097 A 20230125; TW 202302949 A 20230116

DOCDB simple family (application)
EP 22181535 A 20220628; CN 202210677567 A 20220615; JP 2021115543 A 20210713; TW 111123832 A 20220627