

Title (en)

PRINTING MACHINES AND METHOD FOR CLEANING AT LEAST ONE NOZZLE BAR OF AT LEAST ONE PRINTING ASSEMBLY

Title (de)

DRUCKMASCHINEN UND VERFAHREN ZUR REINIGUNG ZUMINDEST EINES DÜSENBALKENS ZUMINDEST EINES DRUCKAGGREGATS

Title (fr)

MACHINES D'IMPRESSION ET PROCÉDÉ DE NETTOYAGE D'AU MOINS UNE BARRE DE BUSES D'AU MOINS UN ENSEMBLE D'IMPRESSION

Publication

**EP 4065376 A1 20221005 (DE)**

Application

**EP 20820888 A 20201207**

Priority

- DE 102020105962 A 20200305
- EP 2020084871 W 20201207

Abstract (en)

[origin: WO2021175469A1] The invention relates to a printing machine, wherein the printing machine comprises at least one printing assembly (01) having at least four nozzle bars (04) with a respective at least one printhead (08), wherein the at least one printing assembly (01) comprises at least one cleaning device (18) and at least one cleaning unit (61), wherein the at least one cleaning device (18) comprises at least one cleaning element (31) having at least one fluid supply opening (38), wherein the at least one cleaning element (31) has at least one storage position and at least one use position, wherein, in the at least one use position, the at least one cleaning element (31) is arranged within a region between at least one nozzle bar (04) of the at least four nozzle bars (04) and a transport path of a printing substrate (03), wherein the at least one cleaning unit (61) comprises at least one removal unit (63) with at least one contact element (64), wherein the at least one contact element (64) is designed as a wiper cloth (64), wherein the at least one removal unit (63) has at least one storage position and at least one use position, wherein, in the at least one use position, the at least one removal unit (63) is arranged within the region between the at least one nozzle bar (04) and the transport path of the printing substrate (03). The invention also relates to another printing machine and a method for cleaning at least one nozzle bar (04) of the at least one printing assembly (01).

IPC 8 full level

**B41J 2/165** (2006.01); **B41J 25/304** (2006.01); **B41J 25/34** (2006.01)

CPC (source: EP US)

**B41J 2/16505** (2013.01 - EP US); **B41J 2/16552** (2013.01 - EP US); **B41J 2/16585** (2013.01 - EP US); **B41J 25/304** (2013.01 - EP US); **B41J 25/34** (2013.01 - EP US); **B41J 2002/1655** (2013.01 - EP US); **B41J 2002/16558** (2013.01 - EP US)

Citation (search report)

See references of WO 2021175469A1

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

DOCDB simple family (publication)

**DE 102020105962 A1 20210909**; CN 115003508 A 20220902; CN 115003508 B 20230328; EP 4065376 A1 20221005; EP 4065376 B1 20230816; JP 2023502162 A 20230120; JP 7299426 B2 20230627; US 11623445 B2 20230411; US 2023077916 A1 20230316; WO 2021175469 A1 20210910

DOCDB simple family (application)

**DE 102020105962 A 20200305**; CN 202080094352 A 20201207; EP 2020084871 W 20201207; EP 20820888 A 20201207; JP 2022545139 A 20201207; US 202017795046 A 20201207