

Title (en)

Spraying device for spraying a liquid product onto paper sheet

Title (de)

Spritzvorrichtung zum Versprühen eines flüssigen Produkts auf einem Papierbogen

Title (fr)

Dispositif de pulvérisation permettant de pulvériser un produit liquide sur une feuille de papier

Publication

**EP 2985385 A1 20160217 (EN)**

Application

**EP 14380022 A 20140811**

Priority

EP 14380022 A 20140811

Abstract (en)

The spraying device for spraying a liquid product onto a paper sheet comprises spraying nozzles (1) connected to a liquid product supply source and arranged in a spray chamber (3) to spray the liquid product onto a moving paper sheet web (2) guided by guide rollers (6), where the spray chamber (3) is delimited in part by the moving paper sheet web (2), and at least one of the guide rollers (6) is located inside the spray chamber (3). In one embodiment, the spraying nozzles (1) are arranged in a rotary support (7) including a tubular wall (7a) with a longitudinal opening (4), and the spray chamber (3) is delimited only by sections of the paper sheet web (2), portions of the tubular wall (7a) adjacent to the longitudinal opening (4), and side walls (5).

IPC 8 full level

**D21H 23/50** (2006.01)

CPC (source: EP)

**B05B 13/0207** (2013.01); **B05B 15/55** (2018.02); **B05B 15/555** (2018.02); **B05B 15/652** (2018.02); **D21H 23/50** (2013.01)

Citation (applicant)

- WO 2013167771 A1 20131114 - BLANCH ANDREU XAVIER [ES], et al
- WO 0042254 A1 20000720 - VALMET CORP [FI], et al
- WO 2006079678 A1 20060803 - METSO PAPER INC [FI], et al
- EP 2146003 A2 20100120 - VOITH PATENT GMBH [DE]
- DE 102008040419 A1 20100121 - VOITH PATENT GMBH [DE]
- WO 2005040497 A1 20050506 - METSO PAPER INC [FI], et al

Citation (search report)

- [X] JP 2012000476 A 20120105 - OJI NEPIA CO LTD, et al
- [X] DE 102008021541 A1 20081120 - METSO PAPER INC [FI]
- [ID] WO 2013167771 A1 20131114 - BLANCH ANDREU XAVIER [ES], et al
- [ID] WO 2005040497 A1 20050506 - METSO PAPER INC [FI], et al
- [AD] WO 0042254 A1 20000720 - VALMET CORP [FI], et al
- [A] WO 02072953 A1 20020919 - METSO PAPER INC [FI], et al
- [A] DE 102011017672 A1 20111103 - METSO PAPER INC [FI]
- [A] EP 2735648 A1 20140528 - VALMET TECHNOLOGIES INC [FI]
- [A] US 5780109 A 19980714 - YAPPEL ROBERT A [US], et al

Cited by

CN113802410A; CN111570149A; CN110325287A; US11090672B2; WO2018102846A1

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