

Title (en)  
SHEET-FED PRINTING PRESS HAVING A DRYER FOR DRYING SHEETS PRINTED BY A NON-IMPACT PRINTING DEVICE

Title (de)  
BOGENDRUCKMASCHINE MIT EINEM VON EINER NON-IMPACT-DRUCKEINRICHTUNG BEDRUCKTE BOGEN TROCKNENDEN TROCKNER

Title (fr)  
PRESSE D'IMPRESSION À FEUILLES AYANT UN SÉCHOIR POUR LE SÉCHAGE DE FEUILLES IMPRIMÉES PAR UN DISPOSITIF D'IMPRESSION SANS IMPACT

Publication  
**EP 4244067 A1 20230920 (DE)**

Application  
**EP 22764716 A 20220811**

Priority  
• DE 102021123675 A 20210914  
• EP 2022072506 W 20220811

Abstract (en)  
[origin: WO2023041262A1] The invention relates to a sheet-fed printing press having a dryer (17) for drying sheets (64) printed by a non-impact printing device (13), the dryer (17) being designed as a hot air dryer and/or as a dryer for drying by IR radiation, wherein: a cooling device (36) is disposed directly downstream of the dryer (17) in the transport direction (T) of the sheets (64); the cooling device (36) has at least one cooling module (37) above a conveying plane (E) in which the sheets (64) are conveyed in a flat state through the cooling device (36); the relevant cooling module (37) is designed in such a way that it uses air as a cooling medium; each of the cooling modules (37) of the cooling device (36) is designed as a blower box (41); each blower box (41) is designed to direct the cooling medium onto the surface of each of the sheets (64) to be cooled; each blower box (41) has blowing nozzles (43); the cooling medium is blown by these blowing nozzles (43) onto the surface of the particular sheet (64) to be cooled; each blower box (41) is designed in such a way that it forms a gap (S37) with a guide face (42) to the surface of the relevant sheet (64) to be cooled; the guide face (42) of the relevant blower body (41) is disposed at such a height above the surface of the relevant sheet (64) to be cooled that the cross-section of an outer annular gap through which a volume flow of the cooling medium exits the gap (S37) is smaller than or almost equal to the total cross-section over all opening faces of the blowing nozzles (43) in the guide face (42).

IPC 8 full level  
**B41F 19/00** (2006.01); **B41F 21/10** (2006.01); **B41F 23/04** (2006.01); **B41J 3/54** (2006.01); **B41J 11/00** (2006.01); **B41J 13/22** (2006.01)

CPC (source: EP US)  
**B41F 19/007** (2013.01 - EP); **B41F 21/10** (2013.01 - EP); **B41F 23/0443** (2013.01 - EP); **B41F 23/0456** (2013.01 - EP); **B41F 23/0466** (2013.01 - EP); **B41F 23/0483** (2013.01 - EP US); **B41J 11/00216** (2021.01 - EP); **B41J 11/0022** (2021.01 - EP); **B41J 11/007** (2013.01 - EP)

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)  
**DE 102021123675 A1 20230316**; CN 116669962 A 20230829; CN 116669962 B 20240716; EP 4244067 A1 20230920; EP 4244067 B1 20240717; JP 2024501348 A 20240111; JP 7493106 B2 20240530; US 11897251 B2 20240213; US 2023391070 A1 20231207; WO 2023041262 A1 20230323

DOCDB simple family (application)  
**DE 102021123675 A 20210914**; CN 202280010055 A 20220811; EP 2022072506 W 20220811; EP 22764716 A 20220811; JP 2023543053 A 20220811; US 202218272251 A 20220811