

Title (en)  
THERMAL PRINTER AND ITS CUTTING UNIT

Title (de)  
THERMODRUCKER UND SEINE SCHNEIDEINHEIT

Title (fr)  
IMPRIMANTE THERMIQUE ET SON UNITÉ DE DÉCOUPE

Publication  
**EP 4063136 B1 20231018 (EN)**

Application  
**EP 22163752 A 20220323**

Priority  
JP 2021048289 A 20210323

Abstract (en)  
[origin: EP4063136A1] A printing unit (4) includes: a head unit (5) including a thermal head (25) configured to perform printing on a recording sheet (P); a platen unit (6) which is detachably combined with the head unit (5), and includes a platen roller (45) configured to convey the recording sheet (P); a fixed blade (46) provided on one of the head unit (5) and the platen unit (6); and a movable blade (26) provided on another one of the head unit (5) and the platen unit (6) so as to be movable relative to the fixed blade (46), wherein the another one of the head unit (5) and the platen unit (6) includes: a rack member (300) coupled to the movable blade (26) so as to be movable integrally with the movable blade (26); a drive mechanism (27) which includes a drive pinion (78) allowed to mesh with the rack member (300), and is configured to move the movable blade (26) between a standby position at which the movable blade (26) is away from the fixed blade (46) and a cutting position at which the movable blade (26) climbs over the fixed blade (46); and a return mechanism (29) which includes a return pinion (131) allowed to mesh with the rack member (300), and is configured to move the movable blade (26) from the cutting position to the standby position side under a state in which the movable blade (26) is stopped at the cutting position, wherein the rack member (300) includes: a drive rack (71) including a plurality of drive rack teeth (71a) allowed to mesh with the drive pinion (78); and a return rack (130) which is formed independently of the drive rack (71), and includes a plurality of return rack teeth (130a) allowed to mesh with the return pinion (131).

IPC 8 full level  
**B41J 11/70** (2006.01); **B26D 1/00** (2006.01); **B26D 1/02** (2006.01); **B26D 1/08** (2006.01); **B26D 7/00** (2006.01); **B41J 2/32** (2006.01)

CPC (source: CN EP KR)  
**B26D 1/025** (2013.01 - EP); **B26D 1/085** (2013.01 - EP); **B41J 2/32** (2013.01 - CN EP KR); **B41J 11/04** (2013.01 - KR);  
**B41J 11/66** (2013.01 - KR); **B41J 11/70** (2013.01 - EP); **B41J 11/703** (2013.01 - CN); **B41J 25/00** (2013.01 - CN); **B41J 29/13** (2013.01 - KR);  
**B41J 29/54** (2013.01 - KR); **B26D 2001/0066** (2013.01 - EP); **B26D 2007/005** (2013.01 - EP); **B41J 2202/31** (2013.01 - KR)

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

DOCDB simple family (publication)  
**EP 4063136 A1 20220928**; **EP 4063136 B1 20231018**; CN 115107378 A 20220927; CN 217598149 U 20221018; JP 2022147153 A 20221006;  
KR 20220132443 A 20220930

DOCDB simple family (application)  
**EP 22163752 A 20220323**; CN 202210287020 A 20220323; CN 202220636103 U 20220323; JP 2021048289 A 20210323;  
KR 20220034596 A 20220321