

Title (en)  
INDUCTION HEATED ROLL APPARATUS

Title (de)  
INDUKTIONSBEHEIZTE WALZENVORRICHTUNG

Title (fr)  
APPAREIL À ROULEAUX CHAUFFÉS PAR INDUCTION

Publication  
**EP 4167686 B1 20231213 (EN)**

Application  
**EP 22199620 A 20221004**

Priority  
• JP 2021169484 A 20211015  
• JP 2022122814 A 20220801

Abstract (en)  
[origin: EP4167686A1] The present invention can not only increase the rotation speed of a roller body (5) but also reduce the size of a single-sided support induction heated roll apparatus (100) and offer the torque and the capacity of the motor required for the single-sided support induction heated roll apparatus (100). The single-sided support induction heated roll apparatus (100) includes a stationary shaft (2), a roller body (5), an induction heater (6), and an axial gap motor (7). The stationary shaft (2) includes one side supported by a machine base (20). The roller body (5) has a cylindrical shape and is rotatably supported by the stationary shaft (2) with a bearing (3, 4) interposed therebetween. The induction heater (6) is provided inside the roller body (5) and allows the roller body (5) to inductively generate heat. The axial gap motor (7) is provided between the machine base (20) and the roller body (5) and rotates the roller body (5) with respect to the stationary shaft (2).

IPC 8 full level  
**H05B 6/14** (2006.01); **B21B 27/08** (2006.01); **B21B 27/10** (2006.01); **B41F 25/00** (2006.01); **B65H 51/04** (2006.01); **D02J 13/00** (2006.01)

CPC (source: EP)  
**B41F 25/00** (2013.01); **D02J 13/005** (2013.01); **H05B 6/145** (2013.01)

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 4167686 A1 20230419; EP 4167686 B1 20231213; CN 219145656 U 20230606**

DOCDB simple family (application)  
**EP 22199620 A 20221004; CN 202222676821 U 20221011**