Title (en)
    Driving apparatus for loom

Title (de)
    Antriebsvorrichtung für eine Webmaschine

Title (fr)
    Dispositif d'entraînement pour métier à tisser

Publication
    EP 1867767 A3 20090527 (EN)

Application
    EP 07008337 A 20070424

Priority
    JP 2006163242 A 20060613

Abstract (en)
    [origin: EP1867767A2] A driving apparatus (30, 50) for a loom (10) includes a main shaft (14) that transmits a rotational force to devices included in the loom (10), an alternating-current motor (16), a speed-reducing mechanism for transmitting rotation of the motor (16) to the main shaft (14) while reducing a rotational speed of the motor (16) at a predetermined ratio, an electromagnetic brake (24) that applies a braking torque to the main shaft (14) when an excitation current is supplied thereto, a drive circuit (34) that supplies alternating-current power to the motor (16), and a brake circuit (36) that supplies the excitation current to the electromagnetic brake (24). When the loom (10) stops, the drive circuit (34) outputs an alternating-current voltage at a frequency corresponding to a synchronous speed lower than the actual rotational speed of the motor (16), so that the motor (16) generates a braking torque in a direction opposite to the rotating direction. In addition, the brake circuit (36) outputs the excitation current to stop the main shaft (14).

IPC 8 full level
    D03D 51/02 (2006.01)

CPC (source: EP)
    D03D 51/002 (2013.01); **D03D 51/007** (2013.01); **D03D 51/06** (2013.01)

Citation (search report)
- [X] US 6307340 B1 20011023 - WAGNER ARNO [DE], et al
- [X] DE 102004034117 A1 20060216 - DORNIER GMBH LINDAUER [DE]
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- [X] DE 4438311 A1 19950504 - NUOVO PIGNONE SPA [IT]

Cited by
    CN112132329A; EP3597806A1

Designated contracting state (EPC)
    AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
    AL BA HR MK RS

DOCDB simple family (publication)
    EP 1867767 A2 20071219; **EP 1867767 A3 20090527**; **EP 1867767 B1 20120613**; CN 101089270 A 20071219; CN 101089270 B 20110126; JP 2007332477 A 20071227

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    EP 07008337 A 20070424; CN 200710101213 A 20070424; JP 2006163242 A 20060613