Title (en)
BALANCING METHOD AND ROTATION MEMBER

Title (de)
AUSWUCHTVERFAHREN UND ROTATIONSELEMENT

Title (fr)
PROCÉDÉ D'ÉQUILIBRAGE ET ÉLÉMENT DE ROTATION

Publication
EP 3315442 B1 20190227 (EN)

Application
EP 17197715 A 20171023

Priority
JP 2016214005 A 20161101

Abstract (en)
[origin: EP3315442A1] In a resonance mode in which bending occurs at a bobbin holding portion 20, an increase in vibration by a mass for balancing is prevented or lessened. Positions of nodes N1 and N2 of the bobbin holding portion 20 in a predetermined resonance mode of a bobbin holder 9, in which bending occurs at the bobbin holding portion 20, are obtained. An unbalance corrector 25 for adding or removing a mass for balancing is provided at or around each node N1, N2, within a range of 10% of the length of the bobbin holding portion 20, the range being defined by taking the position of the node N1, N2 as the midpoint of the range.

IPC 8 full level
B65H 54/54 (2006.01); **B65H 54/20** (2006.01); **B65H 54/547** (2006.01)

CPC (source: CN EP)
B65H 54/20 (2013.01 - CN EP); **B65H 54/44** (2013.01 - CN); **B65H 54/54** (2013.01 - EP); **B65H 54/547** (2013.01 - EP); **B65H 54/70** (2013.01 - CN); **B65H 57/14** (2013.01 - CN); B65H 2701/31 (2013.01 - CN EP)

Cited by
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Designated contracting state (EPC)
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DOCDB simple family (publication)
EP 3315442 A1 20180502; **EP 3315442 B1 20190227**; CN 108002112 A 20180508; CN 108002112 B 20210105; JP 2018072227 A 20180510; JP 6761731 B2 20200930

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EP 17197715 A 20171023; CN 201711035520 A 20171030; JP 2016214005 A 20161101