

Title (en)
GRINDING ROLLER AND ROLLER PRESS

Title (de)
MAHLWALZE UND WALZENPRESSE

Title (fr)
ROULEAU DE BROYAGE ET PRESSE À ROULEAUX

Publication
EP 3774054 B1 20240417 (DE)

Application
EP 19716347 A 20190403

Priority
• DE 102018108690 A 20180412
• EP 2019058390 W 20190403

Abstract (en)
[origin: WO2019197240A1] The invention relates to a grinding roller for a roller press, comprising a cylindrical roller body (6) and at least one lateral wall (7) which is arranged on an end side of the roller body (6) and rotationally fixed to the roller body (6), and which protrudes beyond the outer casing surface of the roller body (6) on the outer side. In addition, the connection between the roller body (6) and the lateral wall (7) is brought about by means of at least one screw connection (9), wherein, in the un-connected state, i.e. when the screw connection provided for the connection is at least not yet tightened with a defined target tightening torque, the lateral wall (7) is in contact with the end wall of the roller body (6) in a first section (13) and a gap (18) is formed between the lateral wall and the end wall of the roller body in a second section (14). In contrast, in the connected state, i.e. when the screw connection (9) provided for the connection is tightened with the defined target tightening torque, this gap (18) is at least partially, preferably completely eliminated as a result of an elastic deformation of the lateral wall (7). Due to this embodiment of the grinding roller, relatively high axial forces acting on the lateral wall (7) can be compensated by a relatively low tightening torque for the screw connection(s) (9), which has a positive effect on the lifespan of the connection.

IPC 8 full level
B02C 4/28 (2006.01); **B02C 4/30** (2006.01)

CPC (source: EP)
B02C 4/283 (2013.01); **B02C 4/30** (2013.01); **B02C 4/305** (2013.01)

Cited by
CN114950637A

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)
WO 2019197240 A1 20191017; AU 2019251695 A1 20201126; AU 2019251695 B2 20211125; BR 112020020752 A2 20210119; CL 2020002593 A1 20210122; DE 102018108690 A1 20191017; EP 3774054 A1 20210217; EP 3774054 B1 20240417; FI 3774054 T3 20240520; PE 20210091 A1 20210111

DOCDB simple family (application)
EP 2019058390 W 20190403; AU 2019251695 A 20190403; BR 112020020752 A 20190403; CL 2020002593 A 20201008; DE 102018108690 A 20180412; EP 19716347 A 20190403; FI 19716347 T 20190403; PE 2020001561 A 20190403