

Title (en)
Heated and/or cooled cylinder

Title (de)
Heiz- und/oder kühlbarer Zylinder

Title (fr)
Cylindre chauffé et/ou refroidi

Publication
EP 0913521 A2 19990506 (DE)

Application
EP 98118608 A 19981001

Priority
DE 19747555 A 19971028

Abstract (en)
The temperature-controlled cylinder has at least one brush seal (5) between a rotating sealed surface and a stationary sealing surface in the roller assembly. The brush seal (5) is between radially or axially aligned sealing surfaces, using at least one ring-shaped brush seal (5). The carrier axis (2), with the feed zone for the heating/cooling medium, has a cylindrical drilling (12) to hold a protective cylindrical tube (6) which rotates with the carrier axis (2). The tube (6) is surrounded by a stationary connection (4) at the end which projects from the carrier axis (2). At least one brush seal (5) is directly between the mantle surface of the end of the tube (6) and the stationary connection (4), or between a bush (11) at the tube (6) end rotating with the carrier axis (2) and the connection (4). The bush can be axially between the brush seal (5) and the adjacent end of the carrier axis (2). The zone is sealed externally between the carrier axis (2) and the projecting tube (6) end by the bush (11). The brush seal (5) is under tension before insertion. At least one other type of seal can be fitted in addition to the brush seal. The heating medium is steam, with an outlet for condensation at the brush seal (5) zone. The steam is fed through a channel (3) into the cylinder, and escapes through the stationary connection (4). A static channel (7) takes condensation from within the cylinder out through the connection (4). One of the channels (3,7) forms a stationary ring channel round the other, with pref. the steam feed channel (3) as the static ring channel section. The steam feed channel (3) is at one end of the cylinder, and the connection (4) is at the other end. The carrier axis (2) is a stub axle at both ends of the cylinder.

Abstract (de)
Ein heiz- und/oder kühlbarer Zylinder umfaßt eine drehbar in einer Stuhlung gelagerte Tragachse (2) und wenigstens einen mit der Tragachse (2) verbundenen stationären Anschluß (4) zum Zuführen und/oder Abführen wenigstens eines Heiz- und/oder Kühlmediums durch den Anschluß (4) und die Tragachse (2) hindurch. Zwischen dem rotierenden Zylinderkörper (1), der Tragachse (2) und/oder wenigstens einem mit diesen rotierendem Teil (6, 11) einerseits und der Stuhlung, dem Anschluß (4) und/oder wenigstens einem anderen stationären Teil andererseits sind Dichtungsmittel vorgesehen, die wenigstens eine zwischen einer jeweiligen rotierenden Dichtfläche und einer jeweiligen stationären Dichtfläche angeordnete Bürstendichtung (5) umfassen. <IMAGE>

IPC 1-7
D21F 5/02; **D21F 5/10**

IPC 8 full level
D21F 5/02 (2006.01); **D21F 5/10** (2006.01)

CPC (source: EP US)
D21F 5/028 (2013.01 - EP US); **D21F 5/10** (2013.01 - EP US)

Cited by
KR100416062B1; CN107724157A; DE102008026496A1

Designated contracting state (EPC)
DE FI SE

DOCDB simple family (publication)
DE 19747555 A1 19990429; EP 0913521 A2 19990506; EP 0913521 A3 19990602; US 6227545 B1 20010508

DOCDB simple family (application)
DE 19747555 A 19971028; EP 98118608 A 19981001; US 17919998 A 19981027