

Title (en)

DECANTER CENTRIFUGE, GEAR BOX AND OPERATING METHOD

Title (de)

DEKANTIERZENTRIFUGE, GETRIEBE UND VERFAHREN ZUM BETRIEB

Title (fr)

DECANTEUSE-CENTRIFUGEUSE, BOITE D'ENGRENAGES ET PROCEDE DE FONCTIONNEMENT

Publication

EP 0883443 A1 19981216 (EN)

Application

EP 97914798 A 19970221

Priority

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Abstract (en)

[origin: WO9730791A1] A decanter centrifuge assembly comprises a bowl (12), a screw conveyor (14) disposed inside the bowl for rotation at a speed different from an angular velocity of the bowl, and a harmonic drive unit (35) including a circular spline (16) drivingly connected to the conveyor. The harmonic drive unit further includes a flexible spline (26) drivingly connected to the bowl and a wave generator (34) disposed in contact with the flexible spline for distorting the flexible spline and enabling a driving of the flexible spline at a rate of rotation incrementally differing from a rate of rotation of the circular spline. The flexible spline has teeth partially meshing with teeth on the circular spline.

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