

Title (en)

Coolant-filtering apparatus for lens-processing machine tools

Title (de)

Kühlmittelfiltriervorrichtung für linsenverarbeitende Werkzeugmaschinen

Title (fr)

Appareil de filtrage de réfrigérant pour outils de machine de traitement de lentille

Publication

EP 2954989 A1 20151216 (EN)

Application

EP 14002009 A 20140611

Priority

EP 14002009 A 20140611

Abstract (en)

A tank (24) receives coolant contaminated with machining residues from a machine tool (10). Filtering means filter the coolant, with separation of the machining residues. A pump (52) sucks the coolant from the tank (24) downstream of the filtering means and recirculates it to the machine tool (10). The filtering means comprise a fine-mesh, hollow filtering member (51) submerged in the tank (24). The pump (52) sucks coolant from the inside of the hollow filtering member (51). A collecting channel (28) formed on the bottom of the tank (24) houses a first motorized auger (32) which conveys the machining residues to an outlet section of the collecting channel (28). A transfer duct (38) houses a second motorized auger (36) which conveys the machining residues to a level higher than a maximum filling level (F) of the tank (24). The second auger (36) is provided with a shaft (36s) increasing in diameter from its inlet end to its outlet end for applying a drying squeezing action to the machining residues.

IPC 8 full level

B26D 7/00 (2006.01); **B24B 9/14** (2006.01); **B24B 55/03** (2006.01)

CPC (source: EP)

B24B 9/146 (2013.01); **B24B 55/03** (2013.01)

Citation (search report)

- [A] EP 1245334 A2 20021002 - NIDEK KK [JP]
- [A] EP 1348518 A2 20031001 - NIDEK KK [JP]
- [A] DE 4426419 C1 19960404 - WERNICKE & CO GMBH [DE]

Cited by

CN114851042A

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2954989 A1 20151216

DOCDB simple family (application)

EP 14002009 A 20140611