

Title (en)
PLATE FREEZER

Title (de)
PLATTENGEFRIERANLAGE

Title (fr)
CONGÉLATEUR À PLAQUES

Publication
EP 3926277 A1 20211222 (EN)

Application
EP 20181117 A 20200619

Priority
EP 20181117 A 20200619

Abstract (en)
Plate freezer, in particular for freezing and/or thawing biopharmaceutical fluids, comprising- a device frame (2),- a plurality of cooling plates (3) mounted on the device frame so as to be movable linearly substantially along a first axis (X1) with respect to the device frame from first relative positions to second relative positions and/or from the second relative positions to the first relative positions and- a drive train (4) for driving the movement of the cooling plates (3), wherein first distances present between neighbouring cooling plates (3) in the first relative positions are large enough to admit containers for to be cooled and/or heated goods between the cooling plates (3) and second distances present between neighbouring cooling plates (3) in the second relative positions are smaller than in the first relative positions, and wherein the drive train (4) comprises- a linear drive device (5), in particular a spindle drive, for creating a linear drive motion substantially along a second axis (X2), which is transversal with respect to the first axis (X1),- a flexible pulling member (6), in particular a chain, for pulling the cooling plates (3) along the first axis, the flexible pulling member (6) comprising a first end (7) and a second end (8), wherein the first end (7) of the flexible pulling member is attached to the cooling plates (3) and/or a mounting device for the cooling plates (3) and the second end (8) of the flexible pulling member (6) is attached to an output side (9) of the linear drive device (5), and, preferably rotatable, guide (10) mounted on the device frame (2) for redirecting the flexible pulling member (6) from an orientation along the first axis (X1) for pulling the cooling plates (3) to an orientation along the second axis (X2) for being pulled by the linear drive device (5).

IPC 8 full level
F25D 31/00 (2006.01)

CPC (source: EP)
F25D 31/001 (2013.01)

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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 3926277 A1 20211222

DOCDB simple family (application)
EP 20181117 A 20200619