

Title (en)

Apparatus for performing sequences of continuous heat treatments in vacuum.

Title (de)

Vorrichtung zu kontinuierlichen folgenden Vakuumwärmebehandlungen.

Title (fr)

Dispositif pour l'exécution de traitements thermiques enchainés en continu sous vide.

Publication

EP 0388333 B1 19940706 (FR)

Application

EP 90420136 A 19900313

Priority

FR 8903794 A 19890317

Abstract (en)

[origin: EP0388333A1] A plant for the treatment of components in a controlled atmosphere, comprising a leakproof vessel (2) and treatment cells (31) attached to the leakproof vessel and capable of communicating with the leakproof vessel to allow the transfer of the component between the treatment cell and the leakproof vessel; a loading and unloading cell (15), each cell comprising a means for grasping (19) the component to keep it suspended in this cell; at least one device (21) for handling the component (17), arranged inside the leakproof vessel (2) and allowing the component to be transferred between the loading and unloading cell (15) and a treatment cell, the component passing through the leakproof enclosure (2). <IMAGE>

IPC 1-7

C21D 1/773; **F27B 9/02**

IPC 8 full level

C23C 8/20 (2006.01); **C21D 1/00** (2006.01); **C21D 1/773** (2006.01); **F27B 5/02** (2006.01); **F27B 5/04** (2006.01); **F27B 5/05** (2006.01); **F27B 9/02** (2006.01); **F27D 7/00** (2006.01)

CPC (source: EP KR US)

C21D 1/00 (2013.01 - KR); **C21D 1/773** (2013.01 - EP US); **F27B 9/028** (2013.01 - EP US)

Citation (examination)

EP 0236639 A1 19870916 - STEIN HEURTEY [FR]

Cited by

EP0423710A1; EP0995805A1; EP0893510A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI SE

DOCDB simple family (publication)

EP 0388333 A1 19900919; **EP 0388333 B1 19940706**; AT E108213 T1 19940715; CA 2012270 A1 19900917; CA 2012270 C 20000509; DE 69010358 D1 19940811; DE 69010358 T2 19941222; ES 2057493 T3 19941016; FR 2644567 A1 19900921; JP 3092136 B2 20000925; JP H02275289 A 19901109; KR 0181176 B1 19990218; KR 900014605 A 19901024; US 5033927 A 19910723

DOCDB simple family (application)

EP 90420136 A 19900313; AT 90420136 T 19900313; CA 2012270 A 19900315; DE 69010358 T 19900313; ES 90420136 T 19900313; FR 8903794 A 19890317; JP 6447990 A 19900316; KR 900003496 A 19900315; US 49437490 A 19900316