

Title (en)
AUTOMATED CENTRIFUGE LOADING DEVICE

Title (de)
AUTOMATISCHE LADEEINRICHTUNG FÜR ZENTRIFUGE

Title (fr)
DISPOSITIF AUTOMATISE PERMETTANT DE CHARGER UNE CENTRIFUGEUSE

Publication
EP 1145104 A4 20071205 (EN)

Application
EP 98966042 A 19981222

Priority
US 9827283 W 19981222

Abstract (en)
[origin: WO0038046A1] A method and apparatus for an automated device for loading a centrifuge where tubes are presented to the centrifuge via an automated routing system. The device includes a stating area for tube adaptors, a dual function tool having a tube gripper which routes tubes between a transport device and centrifuge adaptors, and an adaptor gripper which transports the tube adaptors to and from the centrifuge.

IPC 1-7
G06F 7/00; **G06F 17/00**; **B65G 1/00**

IPC 8 full level
B04B 11/00 (2006.01); **B04B 5/02** (2006.01); **G01N 35/00** (2006.01); **G01N 35/04** (2006.01)

CPC (source: EP)
G01N 35/0099 (2013.01); **B04B 2011/046** (2013.01); **G01N 2035/00495** (2013.01); **G01N 2035/0406** (2013.01)

Citation (search report)
• [A] US 4735776 A 19880405 - YAMAMOTO MASAHIRO [JP], et al
• [A] EP 0629858 A1 19941221 - NITTECO LTD [JP]
• [A] US 5769775 A 19980623 - QUINLAN MICHEL G [CA], et al
• See references of WO 0038046A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0038046 A1 20000629; AU 2203099 A 20000712; CA 2356270 A1 20000629; EP 1145104 A1 20011017; EP 1145104 A4 20071205; JP 2002533200 A 20021008; JP 4382990 B2 20091216

DOCDB simple family (application)
US 9827283 W 19981222; AU 2203099 A 19981222; CA 2356270 A 19981222; EP 98966042 A 19981222; JP 2000590038 A 19981222