

Title (en)
CENTRIFUGE

Publication
EP 0560391 A3 19940810 (DE)

Application
EP 93104088 A 19930312

Priority
DE 4208059 A 19920313

Abstract (en)
[origin: EP0560391A2] A centrifuge is proposed, having a changeable rotor (10) which is driven by an electric motor (11), code elements (14) which are arranged in an annular shape being arranged on the rotor (10) and being sensed by a sensor (15) which is fixed to the housing. A decoder device (17) serves to detect the respectively mounted rotor (10) as a function of the arrangement of the code elements (14). The number of code elements (14) is proportional to the maximum permissible speed of revolution of the respective motor (10). A safety device (18) which compares the frequency of the sensor signals (number of code elements 14 which pass per unit of time) with a predetermined fixed frequency value is additionally connected to the sensor (15), it being possible to trigger a deactivation of the electric motor (11) when the fixed frequency value is reached or exceeded. In this way, the same code elements and a single sensor (15) serve to detect the respective rotor and to perform emergency deactivation of the electric motor (11). <IMAGE>

IPC 1-7
B04B 13/00

IPC 8 full level
B04B 13/00 (2006.01)

CPC (source: EP)
B04B 13/003 (2013.01)

Citation (search report)
• [Y] EP 0226886 A1 19870701 - KONTRON HOLDING AG [CH]
• [Y] GB 961921 A 19640624 - MARTIN CHRIST
• [YD] DE 3818594 A1 19891207 - HERMLE KG BERTHOLD [DE]
• [Y] US 3462670 A 19690819 - WAYE WILLIAM E
• [A] US 4551715 A 19851105 - DURBIN DENNIS [US]
• [AD] DE 3815449 A1 19891116 - SIGMA LABORZENTRIFUGEN GMBH [DE]
• [A] DE 2037530 A1 19710225 - MSE HOLDINGS LTD

Cited by
CN104535789A; CN107430147A; CN103561872A; US10955432B2; US7875098B2; WO2022247330A1; WO2006132577A1; WO2012158093A1; EP1767790B1; EP3318764B1

Designated contracting state (EPC)
AT CH DE FR GB IT LI

DOCDB simple family (publication)
EP 0560391 A2 19930915; EP 0560391 A3 19940810; DE 4208059 A1 19930916

DOCDB simple family (application)
EP 93104088 A 19930312; DE 4208059 A 19920313