

Title (en)
REMOTE DIAGNOSIS OF VACUUM DEVICES

Title (de)
FERNDIAGNOSE VON VAKUUMGERÄTEN

Title (fr)
TÉLÉ-DIAGNOSTIC D'APPAREILS SOUS VIDE

Publication
EP 3096021 B1 20220720 (DE)

Application
EP 15168485 A 20150520

Priority
EP 15168485 A 20150520

Abstract (en)
[origin: JP2017002898A] PROBLEM TO BE SOLVED: To complete a vacuum device and a remote diagnosis method in which diagnosis data required for remote diagnosis can be provided completely by a simple method as much as possible without any distortion and this must be possible to be attained even under an environment where high data safety is required.SOLUTION: A vacuum device 22, in particular such a vacuum pump as one that is suitable for an analysis carried out at a remote analysis site, includes a device for making entire diagnosis data on the vacuum device as well as a calling device. Entire provision of diagnosis data can be started upon request under application of the calling device. The vacuum device includes a provision device that provides entire diagnosis data to a remote analysis site for their transmittance.SELECTED DRAWING: Figure 1

IPC 8 full level
F04D 19/04 (2006.01); **F04C 25/02** (2006.01); **F04D 27/00** (2006.01)

CPC (source: EP)
F04C 25/02 (2013.01); **F04D 19/04** (2013.01); **F04D 27/001** (2013.01); **F04C 2270/80** (2013.01); **F04C 2270/90** (2013.01); **F05D 2260/80** (2013.01)

Citation (examination)
• JP 2000283056 A 20001010 - HITACHI LTD
• WO 2013089126 A1 20130620 - ECO FIRST CO LTD [JP], et al
• WO 2012120078 A2 20120913 - GAMBRO LUNDIA AB [SE], et al
• DE 202012010642 U1 20121218 - REFCO MFG LTD [CH]

Citation (opposition)
Opponent : Edwards Limited
• GB 2424928 A 20061011 - BOC GROUP PLC [GB]
• JP H06249153 A 19940906 - HITACHI LTD
• JP 2000283056 A 20001010 - HITACHI LTD
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