

Title (en)
Ionization pump stage

Title (de)
Ionisationspumpstufe

Title (fr)
Étage de pompe à ionisation

Publication
EP 2747123 A3 20150805 (DE)

Application
EP 13191365 A 20131104

Priority
DE 102012223450 A 20121217

Abstract (en)
[origin: EP2747123A2] The ionization pumping stage (10) comprises an inlet (12) for the gas entering in the pump stage, where an ionization section (14) stands in connection with the inlet in a gas-conducting manner. An ionization unit is provided for the ionization of the gas entered in the ionization section. An acceleration unit (20) is formed for accelerating the ionized gas in the conveying direction of the gas. The gas molecules (32,32') to be conveyed are selected from the group which has hydrogen, oxygen, nitrogen, carbon monoxide and carbon dioxide-molecules. An independent claim is included for a vacuum pump with a turbo molecular pumping stage.

IPC 8 full level
H01J 41/12 (2006.01)

CPC (source: EP US)
F15D 1/0075 (2013.01 - US); **H01J 41/12** (2013.01 - EP US)

Citation (search report)

- [X] US 6559601 B1 20030506 - JOHNSON WAYNE L [US], et al
- [X] US 5899666 A 19990504 - CHUNG KWANG-HWA [KR], et al
- [XAI] US 2182751 A 19391205 - REITHERMAN RALPH W
- [XAI] DE 102009042417 A1 20110127 - VACOM STEUERUNGSBAU UND SERVICE GMBH [DE]
- [XAI] EP 0106377 A2 19840425 - VARIAN SPA [IT]
- [A] WO 2011156864 A1 20111222 - GBC SCIENT EQUIP PTY LTD [AU], et al
- [A] DE 4243860 A1 19940707 - IMM INST MIKROTECH [DE]

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 2747123 A2 20140625; EP 2747123 A3 20150805; EP 2747123 B1 20190306; DE 102012223450 A1 20140618;
DE 102012223450 B4 20190704; US 10132339 B2 20181120; US 2014169986 A1 20140619

DOCDB simple family (application)
EP 13191365 A 20131104; DE 102012223450 A 20121217; US 201314105703 A 20131213