

Title (en)
Stator disc

Title (de)
Statorscheibe

Title (fr)
Disque de stator

Publication
EP 2913533 A1 20150902 (DE)

Application
EP 15152240 A 20150123

Priority
DE 102014102681 A 20140228

Abstract (en)
[origin: JP2015165135A] PROBLEM TO BE SOLVED: To provide a vacuum pump, particularly a turbo molecular pump, and a method for which a stator disc has feasibly high geometrical flexibility and can be manufactured at a low cost as easily and appropriately as possible. SOLUTION: A stator disc 86 in a vacuum pump, particularly a turbo molecular pump 84, comprises at least two stator disc parts 92, preferably two stator disc half parts including a plurality of thin plate blade parts continuous in a peripheral direction and having a partial ring shape, each of the stator disc parts 92 of the partial ring shape including a plurality of thin plate partial segments 94, the thin plate partial segments 94 of the stator disc parts 92 of the partial ring shape being connected to one another via a common injection molded member 100 in an inner circumference 96 and/or an outer circumference 98.

Abstract (de)
Eine Statorscheibe (86) einer Turbomolekularpumpe (10, 84) umfasst wenigstens zwei teiltringförmige Statorscheibenabschnitte (92), vorzugsweise zwei Statorscheibenhälften, mit jeweils mehreren in Umfangsrichtung aufeinanderfolgenden Blechschaufeln. Dabei sind die teiltringförmigen Statorscheibenabschnitte (92) jeweils aus mehreren einzelnen Blechteilsegmenten (94) gebildet und die einzelnen Blechteilsegmente (94) eines jeweiligen teiltringförmigen Statorscheibenabschnitts (92) im Bereich deren Innen- und/oder Außenumfangs (96 bzw. 98) über ein gemeinsames Spritzgussformteil (100) miteinander verbunden. Es werden auch eine Turbomolekularpumpe (10, 84) mit zumindest einer solchen Statorscheibe (86) sowie ein Verfahren zur Herstellung einer solchen Statorscheibe (86) angegeben.

IPC 8 full level
F04D 17/16 (2006.01); **F04D 19/04** (2006.01); **F04D 29/54** (2006.01); **F04D 29/64** (2006.01)

CPC (source: EP)
F04D 17/168 (2013.01); **F04D 19/042** (2013.01); **F04D 29/542** (2013.01); **F04D 29/644** (2013.01)

Citation (search report)

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- [A] DE 69928866 T2 20060706 - BOC EDWARDS JAPAN LTD [JP]
- [A] EP 1918588 A2 20080507 - PFEIFFER VACUUM GMBH [DE]
- [A] EP 1795756 A1 20070613 - BOC EDWARDS JAPAN LTD [JP]
- [A] JP 2004353652 A 20041216 - OSAKA VACUUM LTD

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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

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EP 2913533 A1 20150902; **EP 2913533 B1 20200108**; DE 102014102681 A1 20150903; JP 2015165135 A 20150917; JP 6166296 B2 20170719

DOCDB simple family (application)
EP 15152240 A 20150123; DE 102014102681 A 20140228; JP 2015036440 A 20150226