

Title (en)

SILENCER FOR A VACUUM PUMP, AND VACUUM PUMP WITH SUCH A SILENCER

Title (de)

SCHALLDÄMPFER FÜR EINE VAKUUMPUMPE UND VAKUUMPUMPE MIT EINEM SOLCHEN SCHALLDÄMPFER

Title (fr)

SILENCIEUX POUR POMPE À VIDE, ET POMPE À VIDE DOTÉE DUDIT SILENCIEUX

Publication

EP 4127480 A1 20230208 (DE)

Application

EP 21703646 A 20210203

Priority

- DE 102020109283 A 20200402
- EP 2021052484 W 20210203

Abstract (en)

[origin: WO2021197686A1] The present invention relates to a silencer (S) for a vacuum pump (P) - having a first port (1) for a gas flow, - having a second port (2) for the gas flow and - having a pipe arrangement (3) between the first port (1) and the second port (2), wherein the silencer (S) is tuned for damping sound waves with a selected wavelength of (λ), wherein the pipe arrangement (3) comprises - a first pipe (31) which is connected to the first port (1), - a second pipe (32) which is connected to the second port (2), and - two central pipes (33, 34), wherein the central pipes (33, 34) are connected at a first end to the pipe (31) on the side of the first port (1) and at a second end to the pipe (32) on the side of the second port (2), and wherein a first central pipe (33) of the two central pipes (33, 34) has a first length (l1) and the second central pipe (34) of the two central pipes (33, 34) has a second length (l2) which is longer or shorter than the first length (l1) by half ($\lambda/2$) of the selected wavelength (λ).

IPC 8 full level

F04C 25/02 (2006.01); **F04C 29/06** (2006.01)

CPC (source: EP)

F04C 25/02 (2013.01); **F04C 29/061** (2013.01); **F04C 2240/30** (2013.01); **F05C 2201/021** (2013.01); **F05C 2201/0496** (2013.01); **F05C 2225/00** (2013.01)

Citation (search report)

See references of WO 2021197686A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2021197686 A1 20211007; CN 115335603 A 20221111; EP 4127480 A1 20230208

DOCDB simple family (application)

EP 2021052484 W 20210203; CN 202180025217 A 20210203; EP 21703646 A 20210203