

Title (en)
PARTLY SEALED ION GUIDE AND ION BEAM DEPOSITION SYSTEM

Title (de)
TEILWEISE ABGEDICHTETE IONENLEITUNG UND IONENSTRAHLENABSCHEIDUNGSSYSTEM

Title (fr)
GUIDE D'IONS PARTIELLEMENT SCELLÉ ET SYSTÈME DE DÉPÔT PAR FAISCEAU IONIQUE

Publication
EP 3550587 A1 20191009 (EN)

Application
EP 18165948 A 20180405

Priority
EP 18165948 A 20180405

Abstract (en)
Disclosed herein is an ion guide (32) for guiding an ion beam along an ion path, said ion guide (32) having a longitudinal axis (48) which corresponds to said ion path. Said ion guide (32) comprises a plurality of electrode plates (44) which are arranged perpendicularly to the longitudinal axis (48), each electrode plate (44) having an opening and being arranged such that said longitudinal axis (48) extends through its respective opening, wherein said openings collectively define an ion guide volume (49). The ion guide (32) extends or is configured to extend through a separation wall (20) separating adjacent first and second pumping chambers (12, 14). The ion guide (32) has a first portion (52), in which gaps are formed between at least some of said electrode plates (44) such that uncharged gas can escape from said ion guide volume (49), wherein said first portion (52) is completely located in said first pumping chamber (12). A second portion (54), in which sealing elements (46) are arranged between adjacent electrode plates (44), prevents neutral gas from escaping from that portion of the ion guide volume (49) between adjacent electrode plates (44), said second portion (54) extends at least from said separation wall (20) into said second pumping chamber (14).

IPC 8 full level
H01J 49/06 (2006.01)

CPC (source: EP)
H01J 49/065 (2013.01)

Citation (applicant)
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