

Title (en)

REMOVABLE ION SOURCE CAPABLE OF AXIAL OR CROSS BEAM IONIZATION

Title (de)

ABNEHMbare IONENQUELLE FÜR AXIALE ODER KREUZSTRÄHLIONISATION

Title (fr)

SOURCE D'IONS AMOVIBLE CAPABLE D'IONISATION PAR FAISCEAU AXIAL OU TRANSVERSAL

Publication

EP 4248485 A2 20230927 (EN)

Application

EP 21827311 A 20211119

Priority

- US 202063116075 P 20201119
- US 2021060064 W 20211119

Abstract (en)

[origin: WO2022109252A2] An ion source including an ionization assembly, first and second electron sources, and a magnet assembly. The ionization assembly includes an ionization chamber and at least one ion lens. The ionization assembly has a primary axis defined by the direction of an ion beam exiting the ionization assembly and the ionization chamber and the at least one ion lens are arranged along the primary axis. The first electron source is aligned along the primary axis of the ionization assembly and is configured to provide an electron beam parallel to the primary axis. The second electron source is adjacent to the ionization assembly and is configured to provide an electron beam orthogonal to the primary axis. The magnet assembly includes a magnet. The magnet assembly is movable between a first position in which the magnet is aligned with the first electron source and a second position in which the magnet is aligned with the second electron source.

IPC 8 full level

H01J 49/14 (2006.01)

CPC (source: EP)

H01J 49/145 (2013.01); **H01J 49/147** (2013.01)

Citation (search report)

See references of WO 2022109252A2

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 2022109252 A2 20220527; WO 2022109252 A3 20220707; CN 116529848 A 20230801; EP 4248485 A2 20230927

DOCDB simple family (application)

US 2021060064 W 20211119; CN 202180077115 A 20211119; EP 21827311 A 20211119