

Title (en)  
APPARATUS AND METHOD FOR FOCUSSED AND ANALYZING A CHARGED PARTICLE BEAM

Publication  
**EP 0004065 A3 19791003 (DE)**

Application  
**EP 79100669 A 19790306**

Priority  
AT 162178 A 19780307

Abstract (en)  
[origin: EP0004065A2] 1. A device for focussing and analyzing charged corpuscular beams, in particular secondary ion beams, with at least or - if required - two electrostatic focussing lenses, an entrance diaphragm, an electrostatic sector field lens, an exit diaphragm, a correcting lens and a detector arranged in the direction of the beam, characterized by the fact that an electrostatic projecting lens (11) with at least two (13, 14), but preferably three electrically polarizable diaphragms (12, 13, 14) with their apertures on one axis is arranged in the path of the charged corpuscular beam to be analyzed between the sector field lens (6) and the exit diaphragm (15).

IPC 1-7  
**H01J 39/34**

IPC 8 full level  
**H01J 49/00** (2006.01); **H01J 49/02** (2006.01); **H01J 49/48** (2006.01)

CPC (source: EP)  
**H01J 49/022** (2013.01); **H01J 49/067** (2013.01); **H01J 49/48** (2013.01)

Citation (search report)  
• US 3679896 A 19720725 - WARDLY GEORGE A  
• FR 2317650 A1 19770204 - MINNESOTA MINING & MFG [US]  
• ZEITSCHRIFT FUER PHYSIK, Vol. 214 1968, Berlin D. ANDRICK et al.: "Kurzlebige Compoundzustände in der Niederenergetischen Elektron-Helium-Streuung" Seiten 388-401 \* Seite 392, Zeile 35 - Seite 394, Zeile 3; Figur 2 \*  
• JOURNAL OF APPLIED PHYSICS, Vol. 48, No. 7, Juli 1977 New York K. WIESEMANN et al.: "Energy Analysis of H-ions from a hollowdischarge duoplasmatron" Seiten 2668-2672 \* Seiten 2668-2669, Absatz "Experimental set up", figur 2 \*  
• JOURNAL OF PHYSICS B. ATOMIC AND MOLECULAR PHYSICS, Vol. 8, No. 7, 1975 London M. EYB und H. HOFMANN: "Elastic Electron-Alkali Atom Scattering Near the first Inelastic Threshold" Seiten 1095-1108. \* Seiten 1096-1098 Absatz 2.1; Figur 1 \*

Cited by  
CN111982945A

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
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