

Title (en)  
Single potential ion source

Title (de)  
Einfach-Potential Ionenquelle

Title (fr)  
Source d'ion à potentiel unique

Publication  
**EP 0827179 B1 20011128 (EN)**

Application  
**EP 96306329 A 19960830**

Priority  
EP 96306329 A 19960830

Abstract (en)  
[origin: EP0827179A1] A single potential ion source 50 includes a single conical electrode 58 encircled by a cylindrical magnet 60. At least one filament 56 is placed proximate to the electrode. This arrangement serves to accelerate electrons created by energy from the filament toward a centre axis 59 of the conical electrode. The electrons collide with gas particles to create a focussed ion stream. The stream may be directed into a magnetic field in a mass spectrometer tube. A base 52 supports pins 54 for electrical connections to the electrode 58 and filaments 56. <IMAGE>

IPC 1-7  
**H01J 27/14**; **H01J 49/12**; **H01J 41/04**

IPC 8 full level  
**H01J 27/14** (2006.01); **H01J 41/04** (2006.01); **H01J 49/12** (2006.01)

CPC (source: EP)  
**H01J 27/14** (2013.01); **H01J 41/04** (2013.01); **H01J 49/126** (2013.01)

Citation (examination)  
US 4862032 A 19890829 - KAUFMAN HAROLD R [US], et al

Cited by  
EP1180783A3; WO2007097919A3

Designated contracting state (EPC)  
DE FR GB

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