

Title (en)
Quadrupole mass spectrometer

Title (de)
Quadrupol-Massenspektrometer

Title (fr)
Spectromètre de masse quadripôle

Publication
EP 2315233 A3 20120104 (EN)

Application
EP 10195573 A 20080526

Priority
• EP 08763907 A 20080526
• EP 10195573 A 20080526
• JP 2008001307 W 20080526

Abstract (en)
[origin: EP2315233A2] In a scan measurement in which a mass scan is repeated across a predetermined mass range, when a voltage is returned from a termination voltage of one scan to an initiation voltage for the next scan, an undershoot or other drawbacks occur to destabilize the voltage value. Therefore, an appropriate waiting time is required. Conventionally, this waiting time has been set to be constant regardless of the analysis conditions. On the other hand, in the quadrupole mass spectrometer according to the present invention, the mass difference #M between the scan termination mass and the scan initiation mass is computed based on the specified mass range, and a different settling time is set in accordance with this mass difference. When the mass difference #M is small and hence requires only a short voltage stabilization time, a relatively short settling time is set. This shortens the cycle period of the mass scan, which increases the temporal resolution.

IPC 8 full level
H01J 49/42 (2006.01)

CPC (source: EP)
H01J 49/4215 (2013.01); **H01J 49/429** (2013.01)

Citation (search report)
• [X] JP H04289652 A 19921014 - HITACHI LTD, et al
• [X] GB 1484742 A 19770901 - UNIVERSAL MONITOR CORP
• [A] US 2007114374 A1 20070524 - PREST HARRY F [US], et al
• [A] WO 2007083403 A1 20070726 - SHIMADZU CORP [JP], et al & US 2010193684 A1 20100805 - MUKAIBATAKE KAZUO [JP], et al

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2315233 A2 20110427; EP 2315233 A3 20120104; EP 2315233 B1 20131016

DOCDB simple family (application)
EP 10195573 A 20080526