

Title (en)
Method for chemical analysis

Title (de)
Verfahren zur chemischen Analyse

Title (fr)
Procédé pour l'analyse chimique

Publication
EP 2363877 A1 20110907 (EN)

Application
EP 10405080 A 20100419

Priority
CH 2712010 A 20100302

Abstract (en)
In a method for chemical analysis a first group of particles of a sample of interest is ionized using a first ionization method for generating a first group of ions. A second group of particles of the sample of interest is ionized using a second ionization method which is different from the first ionization method for generating a second group of ions. The first group of ions and the second group of ions are analyzed in a mass analyzer (120), whereas ions of the first group and ions of the second group are detected using the same detector (124) of the mass analyzer. At least one of the ionization methods is operated in a pulsed manner and/or the ionized particles of at least one of the groups are transmitted to the mass analyzer in a pulsed manner. At least in a time interval the first ionization method and the second ionization method are operated simultaneously and ions of the first group and ions of the second group are both transmitted to the mass analyzer (120). This method and a corresponding apparatus have an improved capability to identify chemical compounds. In particular, the improvement may be achieved by high-speed multiplexing of the different ionization methods.

IPC 8 full level
H01J 49/10 (2006.01)

CPC (source: EP)
H01J 49/107 (2013.01); **H01J 49/24** (2013.01); **H01J 49/40** (2013.01)

Citation (applicant)
• US 6469297 B1 20021022 - KATO YOSHIAKI [JP]
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Citation (search report)
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Citation (examination)
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• JP 2008249694 A 20081016 - HITACHI HIGH TECH CORP
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Designated contracting state (EPC)
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