

Title (en)

Microfocus x-ray tube for microscopic inspection apparatus

Title (de)

Mikrofokus-Röntgenröhre für ein Inspektionsmikroskop

Title (fr)

Tube rayons-X à microfoyer pour appareil d'inspection microscopique

Publication

**EP 1557865 A1 20050727 (EN)**

Application

**EP 04001490 A 20040123**

Priority

EP 04001490 A 20040123

Abstract (en)

An X-ray microscopic inspection apparatus with high resolving power equal to or better than 0.1  $\mu\text{m}$  requiring only short exposure time. The X-ray microscopic inspection apparatus comprises X-ray generating means generating X-rays by impinging electrons on a target (3), a magnetic superposition lens having a magnetic field generating portion disposed in the vicinity of an electron generating portion of an electron gun (1). Further, the apparatus includes a liquid metal electron source using liquid metal or a thermal field emission electron source and a target with a heat sink comprising thin CVD diamond plate. <IMAGE>

IPC 1-7

**H01J 35/14**; H01J 35/06; H01J 35/12; H01J 35/18; G21K 7/00

IPC 8 full level

**G21K 7/00** (2006.01); **H01J 35/06** (2006.01); **H01J 35/12** (2006.01); **H01J 35/14** (2006.01); **H01J 35/18** (2006.01); **H05G 1/02** (2006.01)

CPC (source: EP US)

**G21K 7/00** (2013.01 - EP); **H01J 35/12** (2013.01 - EP US); **H01J 35/147** (2019.04 - EP US); **H01J 35/116** (2019.04 - EP); **H01J 35/186** (2019.04 - EP); **H01J 2235/1204** (2013.01 - EP US); **H01J 2237/2807** (2013.01 - EP)

Citation (search report)

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