

Title (en)
X-ray diffraction device comprising cooling medium connection provided on the X-ray tube

Title (de)
Röntgenstrahlen-Beugungsgerät mit Kühlmittel-Verbindung zur Röntgenröhre

Title (fr)
Appareil à diffraction de rayons X comportant une connection pour le médium de refroidissement sur le tube à rayons X

Publication
EP 0633712 B1 20020313 (EN)

Application
EP 94201872 A 19940629

Priority
• EP 94201872 A 19940629
• EP 93201952 A 19930705

Abstract (en)
[origin: EP0633712A1] An X-ray diffraction device, comprising a water-cooled X-ray tube which exhibits a line focus as well as, after rotation through 90 DEG , a point focus. Contrary to customary X-ray tubes, the cooling water is not supplied via the housing (12) in which the X-ray tube is mounted, but the cooling water connections (52, 54) are provided directly on the X-ray tube at the same side of the tube where the high-voltage connector (16) is provided. As a result, rotation of the tube upon changing over from a line focus to a point focus is not hampered by cooling water connections inside the housing of the tube. An additional advantage of this method of supplying the cooling water resides in the fact that the tube base (56) can also be cooled via these ducts. The base would otherwise become inadmissibly hot due to the loss heat from the filament (60). <IMAGE> <IMAGE>

IPC 1-7
H05G 1/04; H01J 35/12; G01N 23/20

IPC 8 full level
H01J 35/10 (2006.01); **H01J 35/12** (2006.01); **H05G 1/04** (2006.01)

CPC (source: EP US)
H01J 35/13 (2019.04 - EP US); **H05G 1/025** (2013.01 - EP); **H05G 1/04** (2013.01 - EP)

Cited by
FR2925760A1; DE102006053760A1; DE102006053760B4; WO2009083534A1; EP1923900A1; US7421064B2

Designated contracting state (EPC)
DE FR GB NL

DOCDB simple family (publication)
EP 0633712 A1 19950111; EP 0633712 B1 20020313

DOCDB simple family (application)
EP 94201872 A 19940629