

Title (en)
X-ray tube and barrier means therefor

Title (de)
Röntgenröhre und Barrierevorrichtung dafür

Title (fr)
Tube à rayons X et élément barrière associé

Publication
EP 0768699 B1 20020619 (EN)

Application
EP 96307066 A 19960927

Priority
GB 9519715 A 19950927

Abstract (en)
[origin: EP0768699A1] An X-ray tube (7) is provided which is capable of generating high intensity X-rays without loss of reliability. The tube (7) includes a barrier means disposed between the focal spot (24) of the incident electron beam and the tube window (31) which prevents scattered electrons from reaching the window (31), whereas X-rays (9) are permitted to pass through at least a portion of the barrier means to reach the window (31). The X-ray permeable portion (20) of the barrier means typically consists of a diamond sheet. The X-ray tube has a small incident angle alpha (preferably between 7 DEG and 13 DEG), a short distance between the focal spot (24) and the window (31), and a take-off angle beta preferably in the range 0 DEG to 20 DEG . <IMAGE>

IPC 1-7
H01J 35/16

IPC 8 full level
H01J 35/16 (2006.01)

CPC (source: EP)
H01J 35/16 (2013.01); **H01J 2235/168** (2013.01)

Cited by
EP1540664A4; DE19900467A1; DE102004030832B4; US7280639B2

Designated contracting state (EPC)
DE GB

DOCDB simple family (publication)
EP 0768699 A1 19970416; EP 0768699 B1 20020619; DE 69621894 D1 20020725; DE 69621894 T2 20030220; GB 9519715 D0 19951129

DOCDB simple family (application)
EP 96307066 A 19960927; DE 69621894 T 19960927; GB 9519715 A 19950927