

Title (en)
X-ray target assembly and methods for manufacturing same

Title (de)
Röntgentarget-Anordnung und Herstellungsverfahren dafür

Title (fr)
Ensemble cible de rayons X et son procédé de fabrication

Publication
EP 2194564 B1 20130522 (EN)

Application
EP 08253881 A 20081204

Priority
EP 08253881 A 20081204

Abstract (en)
[origin: EP2194564A1] The x-ray target assemblies (100) have an oxide dispersion strengthened (ODS) refractory metal alloy substrate (110) that is bonded to a carbon-containing heat sink (116). The x-ray target assemblies have excellent bonding between the substrate and the heat sink. The improved bonding is achieved by placing an oxide-free barrier layer (124) between the ODS metal substrate and the heat sink. The oxide-free barrier layer (124) minimizes or eliminates chemical reactions that would otherwise be possible between the dispersed oxides and the carbon-based heat sink during the manufacturing process. Preventing these undesired reactions while manufacturing the x-ray target assembly yields a device with improved bonding between the heat sink and the substrate, compared to devices manufactured without the barrier layer.

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CPC (source: EP)
H01J 35/108 (2013.01); **H01J 2235/081** (2013.01); **H01J 2235/084** (2013.01)

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JP 2002105552 A 20020410 - NIKKO MATERIALS CO LTD

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