

Title (en)

Shape memory stainless steels with rare earth elements Ce and La

Title (de)

Formgedächtnisedelstahl mit den Seltenerdelementen Ce und La

Title (fr)

Aciers inoxydables à mémoire de forme avec des éléments de terre rares Ce et La

Publication

EP 2607513 A1 20130626 (EN)

Application

EP 12194924 A 20121129

Priority

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Abstract (en)

Shape memory stainless steels with rare earth elements Cerium (Ce) and Lanthanum (La) are disclosed. In one embodiment, raw materials including Manganese (Mn), Silicon (Si), Chromium (Cr), Nickel (Ni), Carbon (C), Ce, La and Iron (Fe) are melted to form a molten alloy of the shape memory stainless steels with rare earth elements Ce and La. Further, the molten alloy is solidified to form an ingot. Furthermore, the ingot is subjected to nondestructive evaluation to assess internal soundness of the ingot. In addition, the evaluated ingot is homogenized to form homogenized shape memory stainless steels with rare earth elements Ce and La.

IPC 8 full level

C22C 38/00 (2006.01)

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Citation (search report)

- [I] DE 1024719 B 19580220 - CARPENTER STEEL CO
- [A] DE 2447137 A1 19750424 - HITACHI METALS LTD
- [A] JP H04154909 A 19920527 - SUMITOMO METAL IND

Cited by

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Designated contracting state (EPC)

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