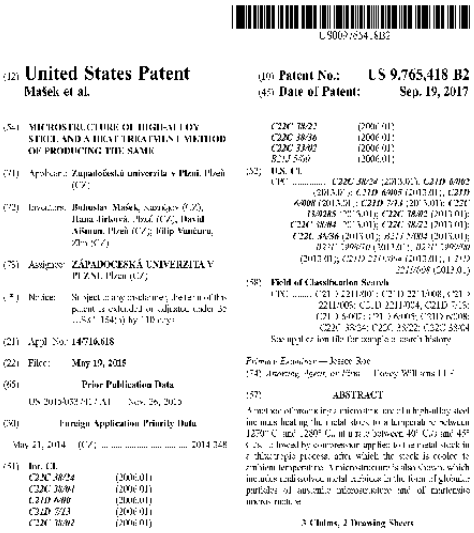
FAKULTA ELEKTROTECHNICKÁ ZÁPADOČESKÉ UNIVERZITY V PLZNI

Patent

Microstructure of High-alloy Steel and a Heat Treatment Method of Producing the Same



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Mašek et al.

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(54) MICROSTRUCTURE OF HIGH-ALLOY STEEL AND A HEAT TREATMENT METHOD OF PRODUCING THE SAME

(71) Applicant: Západočeská univerzita v Plzni, Plzeň (CZ)

(72) Inventors: Bohuslav Mašek, Nezvěgov (CZ); Hana Jirková, Plzeň (CZ); David Aišman, Plzeň (CZ); Filip Vančura, Zlín (CZ)

(73) Assignee: ZÁPADOČESKÁ UNIVERZITA V PLZNI, Plzeň (CZ)

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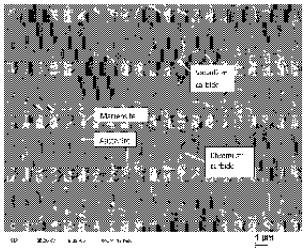
Primary Examiner — Jessee Roe
(74) Attorney, Agent, or Firm — Foley Williams LLP

(57) ABSTRACT

A method of producing a microstructure of a high-alloy steel includes heating the metal stock to a temperature between 1270 °C and 1280 °C, at a rate between 40 °C/s and 45 °C/s, followed by compression applied to the metal stock in a thixotropic process, after which the stock is cooled to ambient temperature. A microstructure is also shown, which includes undissolved metal carbides in the form of globular particles of austenite microstructure and of martensite microstructure.

3 Claims, 2 Drawing Sheets



- V souladu s platnou metodikou Úřadu vlády ČR je uplatňován patent „Microstructure of High-alloy Steel and a Heat Treatment Method of Producing the Same“.
- Patent vznikl v přímé souvislosti s řešením projektu č:

  CZ.01.1.02/0.0/0.0/15_019/0004620
- A method of producing a microstructure of a high-alloy steel includes heating the metal stock to a temperature between 1270.degree. C. and 1280.degree. C., at a rate between 40.degree. C./s and 45.degree. C./s, followed by compression applied to the metal stock in a thixotropic process, after which the stock is cooled to ambient temperature. A microstructure is also shown, which includes undissolved metal carbides in the form of globular particles of austenite microstructure and of martensite microstructure.

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KONTAKTNÍ OSOBA:

Lenka Sobotová

tel.: 37763 4230

sobotovl@katedra.zcu.cz

ŘEŠITELSKÉ PRACOVIŠTĚ:

Západočeská univerzita v Plzni

Fakulta elektrotechnická

Katedra aplikované elektroniky a telekomunikací

Univerzitní 8, 306 14 Plzeň

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EVROPSKÁ UNIE
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