

Title (en)

A process for case hardening steel.

Title (de)

Verfahren zum Einsatzhärten von Stahl.

Title (fr)

Procédé pour la cémentation d'acier.

Publication

EP 0059803 A1 19820915 (EN)

Application

EP 81300922 A 19810305

Priority

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Abstract (en)

A process for case hardening steel is described. A fused bath of inert salt is provided which is comprised of alkali halides, alkali earth halides, or mixtures thereof, and alkali oxides, alkaline earth oxides, alkali carbonates, alkaline earth carbonates, or mixtures thereof. There is added to this fused bath, after suspending the steel therein, urea, dicyanodiamide, pyrolysis/condensation products of urea or dicyanodiamide, or combinations thereof. This will form active ions containing carbon and/or nitrogen, and either the nitrogen and/or carbon will diffuse into the surface of a steel piece suspended in the bath to form either a nitrided, carbonitrided or carburized case depending upon the temperature of the bath, which is selectively maintained between above 540 DEG C. and about 950 DEG C.

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IPC 8 full level

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Citation (search report)

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