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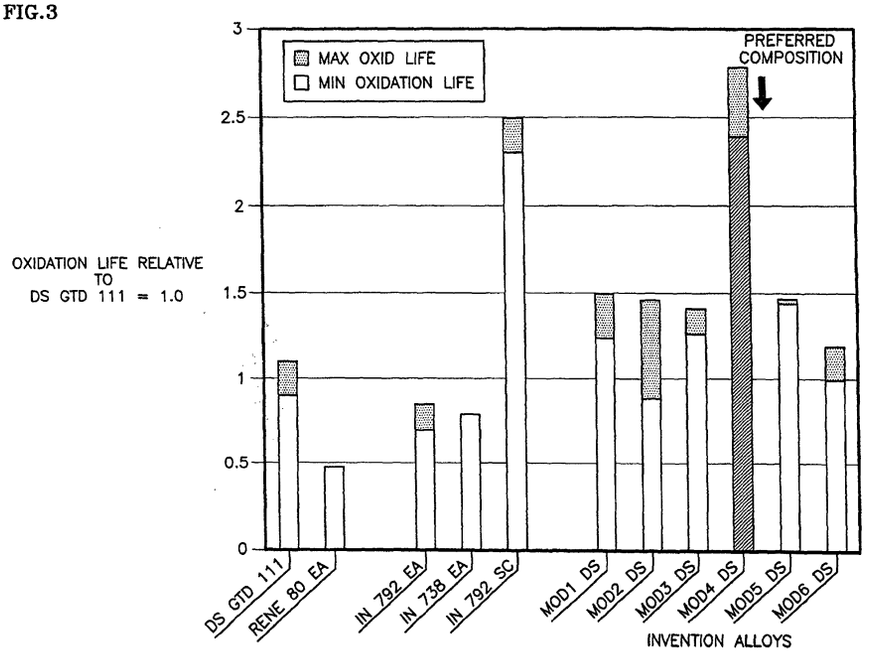
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(54) High strength hot corrosion and oxidation resistant, directionally solidified nickel base superalloy and articles

(57) Corrosion and oxidation resistant, high strength, directionally solidified superalloy alloys and articles are described. The articles have a nominal composition in weight percent of about 12% Cr, 9% Co, 1.9% Mo, 3.8% W, 5% Ta, 3.6% Al, 4.1% Ti, 0.015% B, 0.1 % C, up to about 0.02 Zr, balance essentially nickel, and include no intentional additions of hafnium or zirconium, and also have a small amounts of tantalum carbide. The resultant articles have good hot corrosion resistance and superior oxidation resistance and creep properties. The articles are preferably columnar grain, but may also be single crystal.

FIG.3



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EUROPEAN SEARCH REPORT

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
MUNICH	28 August 2003	Gavriliu, A

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