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(54) Title: DUPLEX STAINLESS STEELS

(57) Abstract: A duplex stainless steel includes less than, in weight percent, 3 percent nickel and 1.5 percent molybdenum. In one embodiment, the duplex stainless steel includes, in weight percent, up to 0.06 percent carbon; 15 to 25 percent chromium; 1 to less than 2.5 percent nickel; up to 3.75 percent manganese; greater than 0.12 up to 0.35 percent nitrogen; up to 2 percent silicon; up to 1.5 percent molybdenum; up to 0.5 percent copper; up to 0.2 percent cobalt; up to 0.05 percent phosphorous; up to 0.005 percent sulfur; 0.001 to 0.0035 percent boron; iron and incidental impurities. The duplex stainless steel provided may be provided in the form of an article of manufacture, such as strip, bar, plate, sheet, casting, tubing or piping. A method for making the duplex stainless steel of the invention also is disclosed.



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