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- (71) **Applicant (for all designated States except US): UNITED PIPELINES ASIA PACIFIC PTE LIMITED** [SG/SG]; 50 Raffles Place, #32-01, Singapore Land Tower, Singapore 048623 (SG).
- (72) **Inventor; and**
- (75) **Inventor/Applicant (for US only): ROSCOE, Cecil Vernon** [GB/SG]; Shangri-la Residences, 1A Lady Hill Road, #03-13, Singapore 258685 (SG).
- (74) **Agent: POH, Chee Kian, Daniel;** Mark & Clerk Singapore LLP, Tanjong Pagar, P.O.Box 636, Singapore 910816 (SG).

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(54) **Title:** AUSTENITIC STAINLESS STEEL

(57) **Abstract:** Austenitic stainless steel is disclosed herein. In the described embodiments, the austenitic stainless steel comprises 16.00 wt % of Chromium to 30.00 wt % of Chromium; 8.00 wt % of Nickel to 27.00 wt % of Nickel; no more than 7.00 wt % of Molybdenum; 0.40 wt % of Nitrogen to 0.70 wt % of Nitrogen, 1.0 wt % of Manganese to 4.00 wt % of Manganese, and less than 0.10 wt % of Carbon, wherein the ratio of the Manganese to the Nitrogen is controlled to less than or equal to 10.0. Austenitic stainless steel based on specified minimum PREN (Pitting Resistance Equivalent Number) values is also disclosed. (1) $PRE = wt\%Cr + 3.3 \times wt\%(Mo) + 16 \times wt\%N \geq 25$ for N in range of 0.40 - 0.70. (2) $PRE = wt\%Cr + 3.3 \times wt\%(Mo+W) + 16 \times wt\%N \geq 27$ for N in range of 0.40 - 0.70 with W present.



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