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(54) Title: HIGH CARBIDE CAST AUSTENITIC CORROSION RESISTANT ALLOYS

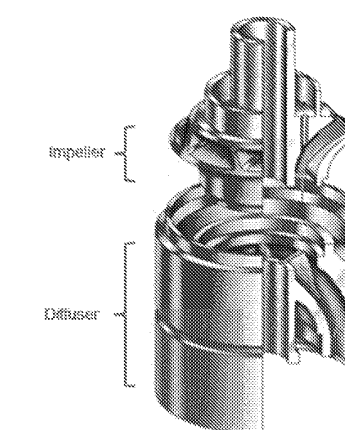


FIGURE 1A

(57) Abstract: Cast alloys comprising 20 to 35 wt.% nickel; 25% to 42.5 wt.% chromium; 1.5 to 2.5 wt.% carbon; 0.5 to 2.0 wt.% manganese; 0.25 to 2.0 wt.% silicon; 0 to 1.5 wt.% aluminum; 0 to 0.5 wt.% titanium, niobium, tantalum combined, 0 to 1 wt.% copper, other residual elements up to 0.5 wt.%, and iron to bring the total percentage to 100 wt.%, are described. The cast alloys can be used to form components for mixers, turbines and pumps, such as impellers, diffusers, and spacers, or for fracking operations as seats or flow diverters, as well as other oil and gas or energy industry components. In some applications, the cast alloys are custom made for downhole electro submersible pump applications.

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