

Abstract:

Nickel base casting alloy, casting, and method for manufacturing an impeller of a rotary machine

5 A nickel base casting alloy is proposed consisting of the composition, by weight percent: 19.0 - 22.5 chromium, 7.0 - 9.5 molybdenum, 2.75 - 4.0 niobium, 1.0 – 1.7 titanium, 0.35 – 1.0 manganese, 0.2 - 1.0 silicon, 0 - 0.03 carbon, 0 – 0.015 phosphorus, 0 - 0.01 sulfur, 0 – 0.35 aluminum, 0 – 13.25 iron, the balance being nickel and incidental impurities. In addition, a casting made from such an alloy is proposed as well as a method for
10 manufacturing an impeller of a rotary machine by means of such an alloy.

No Fig.