

NICKEL-BASE SUPERALLOY COMPOSITION AND ITS USE IN SINGLE-CRYSTAL ARTICLES

ABSTRACT OF THE DISCLOSURE

A composition of matter is about 1 to about 3 percent rhenium, from about 6 to about 9 percent aluminum, from 0 to about 0.5 percent titanium, from about 4 to about 6 percent tantalum, from about 12.5 to about 15 percent chromium, from about 3 to about 10 percent cobalt, from about 2 to about 5 percent tungsten, from 0 to about 0.2 percent hafnium, from 0 to about 1 percent silicon, from 0 to about 0.25 percent molybdenum, from 0 to about 0.25 percent niobium, balance nickel and minor elements. The composition is preferably made into a substantially single crystal article (18), such as a component (20) of a gas turbine engine.

Figure 2