

- [54] ENHANCED COBALT RECOVERY FROM AMMONIACALLY LEACHED REDUCED ORES USING CYANIDE, HYDRAZINE, OR HYDROXYLAMINE COMPOUNDS
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[57] **ABSTRACT**  
 In an ammoniacal leaching process for the recovery of non-ferrous metals, the slurry of reduced ore and ammoniacal solution in the leaching-washing circuit is treated with nitrogenous compounds selected from the group consisting of hydrazine and soluble salts thereof, hydroxylamine and soluble salts thereof, hydrogen cyanide and soluble cyanide salts. These compounds enhance the solubilization of ore cobalt values into the liquid phase of the slurry, thereby enabling the recovery of additional amounts of cobalt which would otherwise be lost with the ore tailings.

8 Claims, 1 Drawing Figure

