

Title (en)

CHEMICAL MIXING, REPLENISHMENT, AND WASTE MANAGEMENT SYSTEM

Title (de)

CHEMISCHES MISCH-, NACHFÜLL- UND ABFALLMANAGEMENTSYSTEM

Title (fr)

MELANGE CHIMIQUE, REGENERATION ET SYSTEME DE TRAITEMENT DES DECHETS

Publication

EP 1080253 A2 20010307 (EN)

Application

EP 99920246 A 19990430

Priority

- US 9909541 W 19990430
- US 8381198 P 19980501

Abstract (en)

[origin: WO9957340A2] A chemical control system for controlling the chemistry of a chemical solution having predetermined chemical constituents in a plating system, such as a NiFe plating system, employs a mix container for containing a plating solution and a hold container for containing a plating solution delivered from the mix container. A precision delivery arrangement delivers a precise predetermined quantum of a predetermined constituent of the plating solution to multiple mix containers and the hold containers. Transfer of plating solution between the mix and hold containers is effected by a transfer pump. Nitrogen gas that has been humidified with deionized water protects the plating solution from either acquiring water or becoming dehydrated, the humidified nitrogen gas being humidified to a predetermined relative humidity with respect to the temperature of the plating solution in the mix container. This is achieved by urging the nitrogen gas through a column that is at the same temperature as the plating solution. Precise delivery of the chemical constituents is achieved by a pneumatic pump arranged serially with an orifice and an inexpensive flow meter. The pneumatic pump is a positive displacement, double diaphragm pump.

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