

Title (en)

Method of disposing with lye leaving cleaning machines.

Title (de)

Verfahren zum Entsorgen von Lauge aus Reinigungsmaschinen.

Title (fr)

Procédé d'épuration de la lessive provenant de machines de nettoyage.

Publication

EP 0264596 A1 19880427 (DE)

Application

EP 87112794 A 19870902

Priority

DE 3633652 A 19861003

Abstract (en)

1. Process for disposal of caustic solution from cleaning machines, in particular bottle cleaning machines (11, 12, 13, 14), by draining the caustic solution intermittently into associated setting tanks (21, 22, 23, 24), settling of the suspended solids taking place after several hours so that about 90% of the sediment is precipitated from the caustic solution after which the caustic solution cleaned to a very large extent is returned to the cleaning machines, while the highly alkaline sludge left as a residue is further treated, characterized in that the sludge and part of the caustic solution remaining in the settling tank (21, 22, 23, 24) are drawn off and passed to a sludge thickening system (30) in which the sludge is further concentrated, that the clarified clean caustic solution accumulating in the upper part of the thickening tower (31) is continuously drawn off and after intermediate storage in a clean caustic solution tank (32) led to a settling tank (21, 22, 23, 24) or a manipulation tank (27), that the sludge accumulating in the sludge thickening tower (31) is passed through a downstream flocculant station (39) in which a flocculant is added to the sludge, and that the sludge is subsequently dewatered in a screening container (37, 40).

Abstract (de)

Mit der angegebenen Reinigungsanlage können die Standzeiten der Lauge durch das Vertauscherprinzip der Laugen untereinander verlängert werden. Durch die Isolierung der Sedimentationstanks sind die Temperaturverluste der einzelnen Laugenbäder gering. Als ein wesentlicher Vorteil der angegebenen Reinigungsanlage ist die umweltschonende Entsorgung der bei der Sedimentation anfallenden Schmutzstoffe zu erwähnen, mit dem Effekt, daß durch die Reinigung der Laugen in der Eindickanlage nur noch sehr geringe Laugenverluste auftreten und nicht wie in herkömmlichen Reinigungsanlagen täglich die vollständigen Sedimentmengen verworfen werden müssen.

IPC 1-7

B67C 1/00

IPC 8 full level

B08B 3/14 (2006.01); **B08B 9/20** (2006.01)

CPC (source: EP)

B08B 3/14 (2013.01); **B08B 9/20** (2013.01)

Citation (search report)

- [AD] FR 2391152 A1 19781215 - SEITZ WERKE GMBH [DE]
- [A] FR 2409787 A1 19790622 - SICK KG OTTO [DE]
- [A] FR 2522317 A1 19830902 - SEITZ ENZINGER NOLL MASCH [DE]
- [AD] DE 2920737 A1 19801204 - SICK PETER
- [A] DE 2738134 B1 19790208 - VAW VER ALUMINIUM WERKE AG

Cited by

DE102009056726B4; EP1468753A1; EP2489438A3; DE102009056726A1; WO2011066933A1

Designated contracting state (EPC)

AT BE DE FR IT NL

DOCDB simple family (publication)

EP 0264596 A1 19880427; **EP 0264596 B1 19891011**; AT E47126 T1 19891015; DE 3633652 A1 19880414; DE 3633652 C2 19881208; DE 3760737 D1 19891116

DOCDB simple family (application)

EP 87112794 A 19870902; AT 87112794 T 19870902; DE 3633652 A 19861003; DE 3760737 T 19870902