



Abstract

A Catalan technical centre based in Spain has developed a technology for the valorisation of chrome tanned leather shavings and trimmings to obtain hydrolysed protein and chrome liquor by chemical hydrolysis. The hydrolysis system is designed to obtain a good separation between sludge and liquid. They are looking for a further development of the process and materials or to license the procedure.

Description

The tanning industry produces important quantities of solid waste, part of them are shavings and trimmings. The equivalent of approximately 10% of the weight of raw hides is removed as shavings and trimmings.

A simple chemical digestion is used to hydrolyse chrome-tanned leather allowing the separation of chrome as tanning liquor able to be re-used in leather tanning and a hydrolysed protein that can find employ in agriculture as follicular fertilizers.

A critical size of material availability is required to make the process economically viable, which is estimated in 10 to 20 metric tones per day at 50% humidity.

Innovations and advantages of the offer

The innovative considerations are:

- The hydrolysis system is designed to obtain a good separation between sludge and liquid.
- The recovery of sludge to obtain a chalk with proteins to be applied as complementary fertilizer in agriculture.
- The recovery of sulphate chrome basic salt to be applied to the tannage of hides.

The main advantages of the procedure are:

- Valorisation of a chrome containing waste.
- Low investment.
- Simple process.

Current and Potential Domain of Application

Tanning sector: the initial material is a by-product of this industry, and some of the generated products can be applied on this sector.

For further information (including IPR status) please contact:

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