

## Extraction of rare earth elements from phosphoric acid streams

### **Disclosure Number**

201303144

### **Technology Summary**

This invention affords the quantitative extraction of rare earths present in phosphoric acid streams produced in phosphoric acid plants. The stream is typically 27%-30% P<sub>2</sub>O<sub>5</sub> while the total amount of rare earths is estimated at 150-200 ppm. The rare earth elements are extracted from the aqueous stream into an organic layer, which is then quantitatively stripped to allow the reuse of the organic phase. The stripping solution then contains the element of interest in a medium suitable for calcination (i.e., affording the lanthanides in their oxide form).

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