

Title (en)

MAGNETIC ACTIVATED PARTICLES FOR ADSORPTION OF SOLUTES FROM SOLUTION

Title (de)

MAGNETAKTIVIERTE PARTIKEL ZUR ADSORPTION VON GELÖSTEN STOFFEN AUS LÖSUNG

Title (fr)

PARTICULES DE CARBONNE A ACTIVATION MAGNETIQUE POUR ADSORPTION DE SOLUTES A PARTIR D UNE SOLUTION

Publication

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Application

**EP 02706453 A 20020226**

Priority

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- US 27155101 P 20010226

Abstract (en)

[origin: WO02069351A1] A composition of and method for forming activated carbon with magnetic properties for magnetic separation of the activated carbon from a liquid being treated is disclosed wherein a solution iron magnetic precursor is intimately mixed or absorbed into a porous carbon precursor or mixed with a solution or meltable carbon precursor to form an essentially homogeneous mixture or solution that when dried and pyrolyzed forms activated carbon particles with magnetic material evenly dispersed throughout the activated carbon material. The activated carbon particles may be of fine particle size, even powdered, and still retain magnetic properties sufficient for magnetic separation. In a particular aspect of the invention, a carbon precursor of soft wood is soaked in a solution of a ferric salt, dried, pyrolyzed and activated.

IPC 1-7

**H01B 1/04**; **B01D 15/00**; **B03C 1/015**; **C02F 1/28**; **C02F 1/48**

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X] US 3803033 A 19740409 - SUTHERLAND G
- [X] US 4201831 A 19800506 - BROOKS RONALD E [US], et al
- [X] GB 1568349 A 19800529 - HITACHI LTD
- See references of WO 02069351A1

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