

Title (en)
PROCESS AND APPARATUS FOR CONVERSION OF ORGANIC, WASTE, OR LOW-VALUE MATERIALS INTO USEFUL PRODUCTS

Title (de)
VERFAHREN UND GERÄT FÜR DIE UMWANDLUNG VON ORGANISCHEM ABFALL ODER MINDERWERTIGEM MATERIAL IN NÜTZLICHE PRODUKTE

Title (fr)
PROCEDE ET APPAREIL DE CONVERSION DE MATIERES ORGANIQUES, DECHETS OU PRODUITS DE FAIBLE VALEUR EN PRODUITS UTILES

Publication
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Application
EP 04758275 A 20040325

Priority

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- US 45852003 P 20030328
- US 71707603 A 20031118
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Abstract (en)
[origin: WO2004087619A2] The invention comprises a multi-stage process and apparatus that converts various waste and lowvalue feedstocks, such as offal, animal manures, municipal sewage sludge, tires, and plastics, to produce useful materials, including gas, oil, specialty chemicals, and carbon solids, in reliable purities and compositions, at acceptable cost and with high energy efficiency, without producing malodorous emissions. The invention further provides for an apparatus for converting an organic liquor into a mixture of hydrocarbons and carbon solids, comprising: a heater for producing a mixture of liquid and vaporized oil from the organic liquor; a reactor for converting the mixture into carbon solids and a hydrocarbon/gas mixture; a first cooler for accepting the carbon solids; and a second cooler for accepting the hydrocarbon/gas mixture. The invention still further relates to a separator that separates out particulates of a dimension of about 1 micron, such as cellular debris from bacteria, from a surrounding fluid.

IPC 8 full level
C07C 1/00 (2006.01); **B09B 3/00** (2006.01); **B29B 17/00** (2006.01); **C02F 11/00** (2006.01); **C02F 11/10** (2006.01); **C02F 11/18** (2006.01); **C05F 5/00** (2006.01); **C10G 1/00** (2006.01); **C10G 9/00** (2006.01); **C10L 1/00** (2006.01); **C10L 1/04** (2006.01)

IPC 8 main group level
C05G (2006.01); **C10L** (2006.01)

CPC (source: EP KR US)
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Citation (search report)

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- [XA] US 5639934 A 19970617 - YAMASAKI NAKAMICHI [JP], et al
- [XA] US 4089773 A 19780516 - ESPENSCHIED WILTON F
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