
Composition of Fatty alcohols
STEP 2
Catalytic Hydrogenation
Composition of Long chain Dicarboxylic acids
STEP 1
Oxicative depolymerization
Polyolefin Plastic Waste

Figure 1

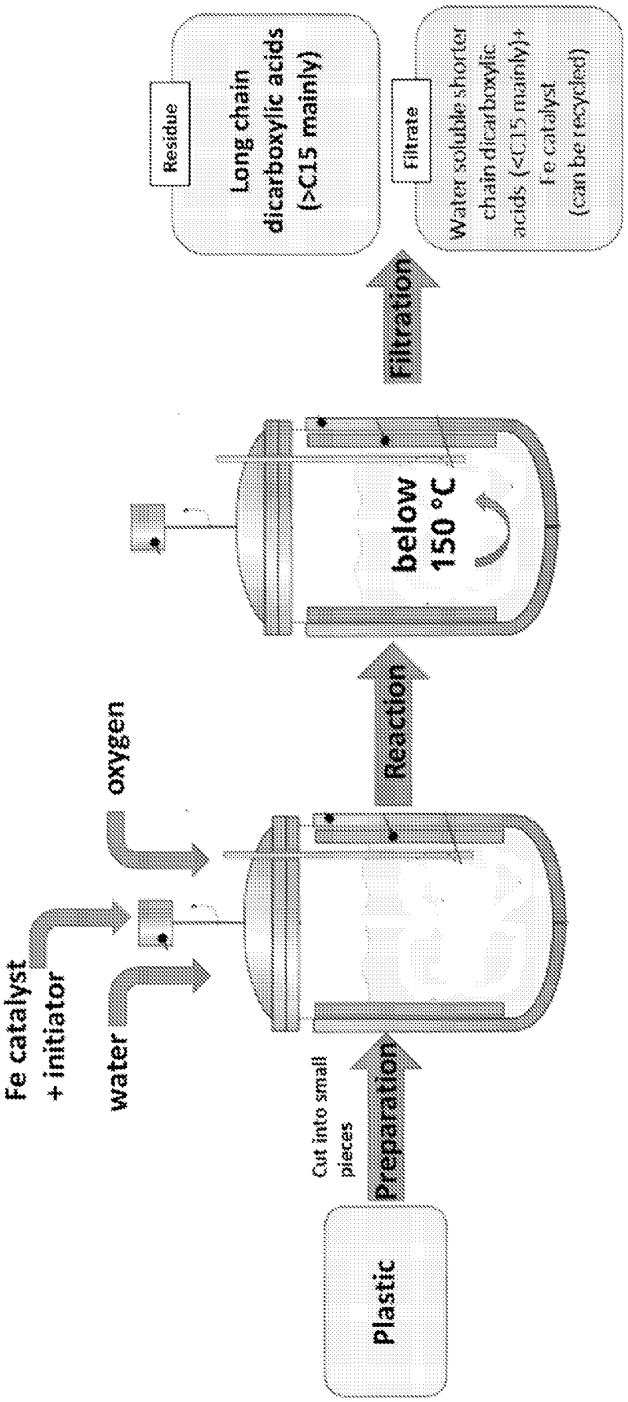
Residue
Long chain dicarboxylic acids (>C15 mainly)
Filtrate
Water soluble shorter chain dicarboxylic acids (<C15 mainly)+ Fe catalyst (can be recycled)
Filtration
below 150 °C
Reaction
oxygen
Fe catalyst + initiator
water
Cut into small pieces
Preparation
Plastic

Figure 2