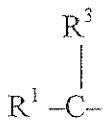
ratios between the elements in the final product. Preferred atomic ratios between the elements in step (i) of the process of the present invention are the following:

M/Ti = 0.5–4.0; Mg/Ti = 3.0–16.0; R–COOH/(Mg + M) = 1.5–5

The carboxylic acid having the formula RCOOH used in step (i) for the partial or complete dissolution of the solids present therein, preferably has a relatively high number of carbon atoms in the chain, ranging from 5 to 15, to favour dissolution in a liquid medium of the hydrocarbon type. Carboxylic acids with a number of carbon atoms higher than 31 are difficult to find on the market and do not offer particular advantages with respect to those having up to 30 atoms in the chain. The group R in the formula of carboxylic acid can be any hydrocarbon radical having up to 30 carbon atoms, including hydrocarbon radicals substituted with inert groups, especially halogens such as fluorine and chlorine. More preferably, R is an aliphatic or cycloaliphatic radical having from 6 to 12 carbon atoms.

Non-limiting examples of said group R according to the present invention are:

- a linear alkyl containing at least 5 carbon atoms; for example the groups n-hexyl, n-octyl, n-decyl, n-undecyl;
- a branched alkyl which can be represented by the following general formula: :



wherein R^1 is hydrogen or alkyl and R^2 and R^3 are alkyl, wherein the sum of the carbon atoms is equal to at least 4 and up to 12; for example isoamyl, 1-ethylhexyl groups, branched aliphatic radicals of versatic acids;

- an alkyl carrying a branching on the secondary carbon atom in β with respect to the carbon atom of the carboxyl and having from 4 to 12 carbon atoms; for example in 3-ethyl pentanoic and citronellic acid;
- a cycloalkyl, aryl, alkylcycloalkyl or alkylaryl having the general formula:

$$R^4\text{-}(CH_2)_s\text{-}$$

wherein R^4 represents the cycloalkyl or aryl portion, having from 5 to 10