then supplied into the reaction system, or at least one of the organic acids and the organic acid esters may be supplied from each line into the reaction system without mixed with isobutanol.

[0022] Examples of the organic acids include mono- and poly-carboxylic acids. Examples of the organic acids include carboxylic acids such as saturated aliphatic carboxylic acids, unsaturated aliphatic carboxylic acids, alicyclic carboxylic acids, and aromatic carboxylic acids. Specific examples of the organic acids include formic acid, acetic acid, propionic acid, butyric acid, valeric acid, caproic acid, enanthic acid, caprylic acid, pelargonic acid, capric acid, acrylic acid, methacrylic acid, benzoic acid, toluic acid, anisic acid, succinic acid, malonic acid, maleic acid, itaconic acid, phthalic acid, ~~isophthalic acid,~~ isophthalic acid, and terephthalic acid. From the viewpoint of improving the selectivity of isobutylene, as the organic acids, formic acid, acetic acid, propionic acid, butyric acid, valeric acid, benzoic acid, terephthalic acid, and methacrylic acid are preferable, and acetic acid, propionic acid, butyric acid, valeric acid, and methacrylic acid are more preferable. These organic acids may be used singly or in combination of two or more kinds thereof.

[0023] Examples of the organic acid esters include mono- and poly-carboxylate esters. Examples of the organic acid esters include carboxylate esters such as saturated aliphatic carboxylate esters, unsaturated aliphatic carboxylate esters, alicyclic carboxylate esters, and aromatic carboxylate esters. Specific examples of the organic acid esters include formate esters such as methyl formate, ethyl formate, propyl formate, butyl formate, and isobutyl formate; acetate esters such as methyl acetate, ethyl acetate, n-butyl acetate, isobutyl acetate, tert-butyl acetate, and phenyl acetate; propionate esters such as methyl propionate, ethyl propionate, propyl propionate, n-butyl propionate, isobutyl propionate, and tert-butyl propionate; butyrate esters such as methyl butyrate,