beneficial to use extractive distillation in said third distillation column, using an extractant to facilitate the separation between the dialkyl carbonate and the alkanol. The extractant can be selected from many compounds, in particular alcohols such as phenol or ethers such as anisole. However, it is preferred to employ an alkylene carbonate as extractant. It is most advantageous to obtain the separation in the presence of the alkylene carbonate that is being used as starting material.

The top stream from the third distillation column comprising unconverted alkanol may be recycled to transesterification step (a).

The bottom stream from the third distillation column comprising dialkyl carbonate may be subjected to a further purification. This further purification may comprise an ion-exchange step, as described in US5455368. Alternatively, said bottom stream from the third distillation column may be subjected to distillation in another distillation column to obtain a top stream comprising dialkyl carbonate and a bottom stream comprising compounds having a higher boiling point than dialkyl carbonate.

In step (d) of the present process, alkanediol is recovered from the bottom stream from the second distillation column comprising alkanediol and alkylene carbonate. A process for recovery of alkanediol from a stream comprising alkanediol and unconverted alkylene carbonate is disclosed in above-mentioned WO2008090108~~, which is herein incorporated by reference~~. Unconverted alkylene carbonate separated from alkanediol may be recycled to transesterification step (a).