alpha,omega-dicarboxylic diesters, in which, firstly, the corresponding fatty acid esters are prepared from the triglyceride by transesterification, and then a catalytic alkoxycarbonylation is carried out.

It is therefore the technical object of the invention to provide a process for preparing linear alpha,omega-dicarboxylic diesters which makes it possible to cost-effectively prepare the reaction product directly from triglycerides in just one reaction step.

Hitherto, no catalytic process is known from the prior art in which linear alpha,omega-dicarboxylic dialkyl esters can be prepared directly from triglycerides in one reaction step.

The embodiments disclosed hereintechnical object of the invention is achieved by a process for preparing linear alpha,omega-dicarboxylic diesters, preferably alpha,omega-dicarboxylic dialkyl esters, where a triglyceride which contains fatty acid radicals having mono- or polyunsaturated carbon chains is reacted in the presence of a catalyst with carbon monoxide, an acid and an OH group donor, and where the reaction is carried out in one reaction step.

In a first aspect, there is provided a process for preparing linear alpha,omega-dicarboxylic diesters, where a triglyceride which comprises fatty acid radicals having mono- or polyunsaturated carbon chains is reacted in the presence of a catalyst with carbon monoxide, an acid and an OH group donor and where the reaction is carried out in one reaction step.

The advantage of this process compared with the prior art is the saving of one reaction step and, associated therewith, an essential simplification of the technical course of such a process. Furthermore, as a result of simplifying the process, it can also be carried out more cost-effectively.

A further advantage of the process according to the invention is also that the catalyst can be used in smaller amounts than known in the prior art. Even at relatively small use amounts of the catalyst, high yields and selectivities are achieved.

Furthermore, smaller amounts of solvents are also required in the reaction, which likewise simplifies the reaction process.