Claims

1. A continuous process for the production of an alkyl ester product comprising the steps of carbonylating ethylene with carbon monoxide in the presence of C_{1-6} alkanol co-reactant to form the said alkyl ester product, wherein the carbonylation takes place in the presence of a catalyst system comprising;

    a. a bidentate ligand,
    b. a catalytic metal selected from a group 8, 9 or 10 metal or a compound thereof, and
    c. a sulphonic acid capable of forming an acid alkyl ester with the C_{1-6} alkanol,

    the process including the step of separating the formed alkyl ester product from a carbonylated crude product stream by suitable treatment effective to vaporise the alkyl ester product in a single stage flash distillation column and provide a purified alkyl ester product stream separated from the said bidentate ligand and catalytic metal, wherein the said distillation column includes further separation means effective to provide further separation of the product from the ligand and catalytic metal.

2. A process as claimed in claim 1, wherein the further separation means is packing in or associated with the upper part of the flash distillation column and/or is provided by trays.

~~16. A process as hereinbefore described and with reference to the examples and/or drawings.~~