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(71) Applicant: **BASF SE** [DE/DE]; Carl-Bosch-Strasse 38,
67056 Ludwigshafen am Rhein (DE).

(72) Inventors: **WEISSKER, Wolf-Steffen**; Carl-Bosch-
Strasse 38, 67056 Ludwigshafen am Rhein (DE). **GOETZ,
Manuel Manfred**; Carl-Bosch-Strasse 38, 67056 Lud-
wigshafen am Rhein (DE). **HOFEN, Kai**; Carl-Bosch-
Strasse 38, 67056 Ludwigshafen am Rhein (DE). **FRIE-
DRICH, Holger**; Carl-Bosch-Strasse 38, 67056 Lud-
wigshafen am Rhein (DE).

(74) Agent: **ALTMANN STÖSSEL DICK PATENTAN-
WÄLTE PARTG MBB**; Dr. Andreas Altmann, Isartorplatz
1, 80331 München (DE).

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(54) Title: INTEGRATED PROCESS FOR SIMULTANEOUSLY PREPARING ALKALI METAL METHOXIDES

(57) Abstract: In a first aspect, the present invention relates to an integrated process for simultaneously preparing n mixtures P(i) comprising alkali metal methoxide and methanol, comprising preparing one or more alkali metal methoxides in n reactive distillation columns K(i) under reactive distillation conditions from n streams H(i) and n streams G(i) comprising methanol, thereby obtaining n top streams W(i) comprising methanol and water; and obtaining n bottoms streams P(i) comprising alkali metal methoxide A(i)OMe and methanol; wherein at least a first stream W(1) and a second stream W(2) are at least partially fed into the rectification column D in that at least a part of the stream W(1) is fed into the lower part of the rectification column D at a position I(1); and at least a part of the stream W(2) is fed into the lower part of the rectification column D at a position I(2), wherein the position I(2) is located below the position I(1) and wherein between the positions I(1) and I(2), the rectification column D is equipped with internals. A second aspect of the invention relates to a chemical production unit for carrying out the process according to the first aspect; and a third aspect of the invention is directed to the use of a chemical production unit according to the second aspect or of a process according to the first aspect for simultaneously producing n mixtures P(i) comprising alkali metal methoxide and methanol.

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