

Title (en)

METHOD FOR PRODUCING ACROLEIN AND/OR ACRYLIC ACID FROM PROPANE

Title (de)

VERFAHREN ZUR HERSTELLUNG VON ACROLEIN UND/ODER ACRYLSÄURE AUS PROPAN

Title (fr)

PROCEDE DE PRODUCTION D'ACROLEINE ET/OU D'ACIDE ACRYLIQUE A PARTIR DE PROPANE

Publication

**EP 1109773 A1 20010627 (DE)**

Application

**EP 99941556 A 19990810**

Priority

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Abstract (en)

[origin: DE19837518A1] In the production of acrolein and/or acrylic acid from propane, the oxygen required in reaction stage 1 (catalytic dehydrogenation to propene) is supplied as nitrogen-containing modified air containing less N<sub>2</sub> and more O<sub>2</sub> than normal air and some of the N<sub>2</sub> in the stage 1 product is removed before this product is used in further stages (propene oxidation). A process for the production of acrolein (AC) and/or acrylic acid (AA) from propane, involving (1) partial oxydehydrogenation to propene with molecular oxygen using homogeneous and/or heterogeneous catalysts and (2) catalytic gas-phase oxidation of the propene-containing product gas in further stage(s) to give AC and/or AA. In this process, the molecular oxygen required in stage 1 (other than circulating oxygen) is added to the starting gas mixture in the form of nitrogen-containing modified air with a lower N<sub>2</sub> content and a higher O<sub>2</sub> content than normal air, and at least some of the molecular N<sub>2</sub> in the product mixture from stage 1 is removed before this mixture is used in stage(s) 2.

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

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