Title (en)

PROCESS FOR THE PREPARATION OF 4-AMINODIPHENYLAMINE PRECURSORS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON 4-AMINODIPHENYLAMIN-VORLÄUFERN

Title (fr)

PROCÉDÉ POUR LA PRÉPARATION DE PRÉCURSEURS DE 4-AMINODIPHÉNYLAMINE

Publication

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Application

EP 13824684 A 20131216

Priority

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Abstract (en)

[origin: WO2015094128A1] Process for the preparation of 4-aminodiphenylamine precursors by reacting aniline and nitrobenzene in the presence of water and a base, with controlled amount of water with respect to the base, characterised in that the mole ratio of water to the dosed base, obtained after extraction of organic impurities by an aromatic solvent of an aqueous phase from hydrogenation of a condensation mixture, is between 3.99 and 3:1 at the start of the coupling reaction, and between 0.40 and 0.59:1 at the end of the coupling reaction, and the end of the coupling reaction is indicated by full conversion of nitrobenzene or by achieving the maximum content 2 wt. % of the initial amount of nitrobenzene in the reaction mixture. The ingredients are continuously fed into reactor cascades in the required ratio to the condensation process, the mole ratio of aniline to nitrobenzene is between 1 :1 and 10:1, and hydrogenation of the condensation product in the presence of a hydrogenation catalyst and added water is followed by separation of the hydrogenation catalyst, and an organic phase, containing 4-aminodiphenylamine, is separated from the aqueous phase, containing the released base.

IPC 8 full level

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CPC (source: EP)

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