

Title (en)

METHOD FOR THE ORGANOMETALLIC PRODUCTION OF ORGANIC INTERMEDIATE PRODUCTS COMPRISING CARBON-HETEROATOM BONDS ACHIEVED BY THE DEPROTONATION OF HETEROATOMS

Title (de)

VERFAHREN ZUR METALLORGANISCHEN HERSTELLUNG ORGANISCHER ZWISCHENPRODUKTE MIT KOHLENSTOFF-HETEROATOM-BINDUNGEN BER DIE DEPROTONIERUNG VON HETEROATOMEN

Title (fr)

PROCEDE DE FABRICATION ORGANOMETALLIQUE DE PRODUITS INTERMEDIAIRES ORGANIQUES CONTENANT DES LIAISONS CARBONE-HETEROATOME PAR DEPROTONATION D'HETEROATOMES

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Application

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Abstract (en)

[origin: DE10240260A1] Formation of heteroatom-carbon bonds comprises reacting an aliphatic or aromatic halide with lithium, using the resulting organolithium compound to deprotonate a heteroatom, and reacting the resulting lithium salt with a carbon electrophile. Formation of heteroatom-carbon bonds comprises reacting an aliphatic or aromatic halide of formula (I) with lithium, using the resulting organolithium compound of formula (II) to deprotonate a compound of formula (III), and reacting the resulting lithium salt of formula (IV) with a carbon electrophile to give a product of formula (V): R-Hal (I) R-Li (II) R1-X-H (III) R1-X-Li (IV) R1-X-EI (V) R = 1-20C alkyl, aryl or heteroaryl; alkyl substituted with alkyl, aryl, heteroaryl, alkoxy, dialkylamino or alkylthio; or (un)substituted 3-8C cycloalkyl; Hal = F, Cl, Br or I; X = O, S, =N or NR2; R1, R2 = H, 1-20C alkyl, 2-20C alkenyl or alkynyl, substituted (cyclo)alkyl, acyl, alkoxy, aryloxy, (di)alkylamino, (di)arylamino, imino, sulfone, sulfonyl, (un)substituted phenyl, alkylthio, diarylphosphino, dialkylphosphino, alkylarylphosphino, (di)alkyl- or (di)arylcarbamoyl, alkylarylcarbamoyl, alkoxyalkyl, carboxylate, alkylcarboxylate, CN, CHO or heteroaryl, or R1+R2 forms an aromatic or alicyclic ring; EI = electrophile.

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IPC 8 full level

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C-Set (source: EP US)

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