

Title (en)

SYNTHESIS OF SUBSTITUTED TRIPHENYLENES, USEFUL AS DISCOTIC LIQUID CRYSTALS

Title (de)

HERSTELLUNG VON SUBSTITUIERTEN TRIPHENYLENEN, BRAUCHBAR FÜR DISCOTISCHE FLÜSSIGKRISTALLE

Title (fr)

SYNTHESE DE TRIPHENILENES SUBSTITUES UTILES POUR LES CRISTAUX LIQUIDES EN FORME DE DISQUE

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Application

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Abstract (en)

[origin: GB2279072A] Substituted triphenylenes, required in the synthesis of polymeric discotic liquid crystals, are made using an oxidising agent (eg FeCl₃ or NOBF₄) to couple suitably substituted benzenes with suitably substituted benzenes or biphenyls. The coupling is followed by treatment with a reducing agent (eg methanol). For example, iron (III) chloride in organic solvent at room temperature may be used to effect the oxidative coupling of 1,2-dialkoxybenzenes to 3,3',4,4'-tetraalkoxybiphenyls. The same oxidation-reduction protocol also proves effective in the trimerisation of 1,2-dialkoxybenzenes.

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