

Title (en)

HIGH REFRACTIVE INDEX OPTICAL RESIN COMPOSITION

Title (de)

HARZ-ZUSAMMENSETZUNG FÜR OPTISCHE MATERIALIEN MIT HOHEM BRECHUNGSINDEX

Title (fr)

COMPOSITION DE RESINE OPTIQUE A INDICE DE REFRACTION ELEVE

Publication

EP 1412402 A1 20040428 (EN)

Application

EP 01955957 A 20010725

Priority

US 0123394 W 20010725

Abstract (en)

[origin: WO03011926A1] Polymerizable compositions are described comprising: (a) a mixture of thio(meth)acrylate functional monomers comprising: (a)(i) a first thio(meth)acrylate functional monomer, e.g., bis(thiomethacrylate)-1,2-ethylene; and (a)(ii) a second thio(meth)acrylate functional monomer, which is chain extended; (b) an aromatic monomer having at least two vinyl groups, e.g., divinyl benzene; (c) a polythiol monomer having at least two thiol groups, e.g., pentaerythritol tetrakis(3-mercaptopropionate); and (d) a comonomer selected from: (d)(i) an anhydride monomer having at least one ethylenically unsaturated group, e.g., methacrylic anhydride; (d)(ii) a monomer having at least three (meth)acryloyl groups, e.g., pentaerythritol tetrakis(acrylate); and (d)(iii) mixtures of monomers (d)(i) and (d)(ii). A polymerizate of the polymerizable composition has a refractive index of at least 1.57 and an Abbe number of at least 33.

IPC 1-7

C08F 228/02; **C08F 220/38**; **C08F 212/34**; **C08F 222/10**; **C08F 222/04**; **G02B 1/04**

IPC 8 full level

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