

Title (en)

PROCESS FOR PRODUCING NANOCRYSTALS AND NANOCRYSTALS PRODUCED THEREBY

Title (de)

VERFAHREN ZUR HERSTELLUNG VON NANOKRISTALLEN UND DADURCH HERGESTELLTE NANOKRISTALLE

Title (fr)

PROCEDE POUR PRODUIRE DES NANOCRISTAUX ET NANOCRISTAUX AINSI OBTENUS

Publication

EP 1601612 A2 20051207 (EN)

Application

EP 04775831 A 20040310

Priority

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- US 45319803 P 20030311

Abstract (en)

[origin: WO2005022120A2] A process for producing nanocrystals and nanocrystals produced thereby . The process comprises contacting a metal precursor with a mixture, which includes a coordinating solvent and optionally a surfactant and metal catalyst, to form a first precursor mixture. The process also comprises heating the first precursor mixture to a first temperature and contacting the first precursor mixture with a second precursor mixture, which may be a Group V or Group VI precursor, to form a reaction mixture at a second temperature. The process further comprises heating the reaction mixture at a third temperature to grow nanocrystals, whereby the second temperature is no more than about 15°C lower than the first temperature. The figure is a flowchart depicting the nanocrystal production process.

IPC 1-7

B82B 1/00; B82B 3/00; C01B 25/08; C01B 21/06; C01B 21/072

IPC 8 full level

B82B 1/00 (2006.01); **B82B 3/00** (2006.01); **C01B 19/00** (2006.01); **C01B 21/06** (2006.01); **C01B 21/072** (2006.01); **C01B 25/08** (2006.01);
C30B 7/00 (2006.01); **C30B 29/60** (2006.01)

IPC 8 main group level

G01N (2006.01)

CPC (source: EP)

B82Y 30/00 (2013.01); **C01B 19/007** (2013.01); **C01B 21/0632** (2013.01); **C30B 7/00** (2013.01); **C30B 7/005** (2013.01); **C30B 29/605** (2013.01);
C01P 2002/30 (2013.01); **C01P 2002/72** (2013.01); **C01P 2004/04** (2013.01); **C01P 2004/10** (2013.01); **C01P 2004/30** (2013.01);
C01P 2004/54 (2013.01); **C01P 2004/64** (2013.01)

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