

Title (en)

PROCESS FOR PRODUCING ATOMIC QUANTUM CLUSTERS

Title (de)

VERFAHREN ZUR HERSTELLUNG ATOMARER QUANTENCLUSTER

Title (fr)

PROCÉDÉ DE PRODUCTION DE GRAPPES QUANTIQUES ATOMIQUES

Publication

**EP 3765220 A1 20210120 (EN)**

Application

**EP 19700963 A 20190124**

Priority

- EP 18382038 A 20180124
- EP 2019051728 W 20190124

Abstract (en)

[origin: WO2019145409A1] The present invention provides an easy and scalable process for producing atomic quantum clusters (AQC) with a high yield and without the need of capping ligands, in the presence of a promoter. Moreover, the invention provides a mixture comprising at least one atomic quantum cluster, optionally a metal salt, optionally a hole scavenger having a standard electrode potential lower than the HOMO orbital of the AQC, optionally an oxidant having a standard electrode potential over the standard electrode potential of said metal ion, and a polar solvent, wherein the metal salt and the hole scavenger are both soluble in the polar solvent and do not react with each other, and wherein the number of equivalents of hole scavenger in the mixture are higher than the number of equivalents of metal salt in the mixture.

IPC 8 full level

**B22F 1/054** (2022.01); **B22F 1/0545** (2022.01); **B22F 1/10** (2022.01); **B22F 9/24** (2006.01)

CPC (source: EP KR US)

**B22F 1/054** (2022.01 - EP KR US); **B22F 1/0545** (2022.01 - EP KR US); **B22F 1/10** (2022.01 - EP KR US); **B22F 9/24** (2013.01 - EP KR US)

Citation (search report)

See references of WO 2019145409A1

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