

Title (en)

DEVICE AND METHOD FOR USING DIAMOND NANOCRYSTALS HAVING NV COLOUR CENTRES IN CMOS CIRCUITS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR VERWENDUNG VON DIAMANT-NANOKRISTALLEN MIT NV-FARBZENTREN IN CMOS-SCHALTKREISEN

Title (fr)

DISPOSITIF ET PROCÉDÉ D'UTILISATION DE NANOCRISTAUX DE DIAMANT COMPORTANT DES CENTRES DE COULEURS NV DANS DES CIRCUITS CMOS

Publication

EP 3980797 A1 20220413 (DE)

Application

EP 20756754 A 20200722

Priority

- DE 102019009153 A 20190725
- DE 102019009155 A 20190805
- DE 102019005484 A 20190805
- DE 102019129092 A 20191028
- DE 102019130115 A 20191107
- DE 102020107831 A 20200322
- DE 102020003532 A 20200405
- DE 2020100648 W 20200722

Abstract (en)

[origin: WO2021013308A1] The invention relates to a sensor system on the basis of diamonds with a high density of NV centres. The description comprises a) methods for producing the necessary diamonds with high NV centre density, b) features of such diamonds, c) sensor elements for the use of the fluorescence radiation of such diamonds, d) sensor elements for the use of the photocurrent of such diamonds, e) systems for evaluating these variables, f) systems with reduced noise for evaluating these systems, g) housing for the use of such systems in automatic placement systems, g) method for testing these systems, and h) a musical instrument as an example of a final use of all of these devices and methods.

IPC 8 full level

G01R 33/032 (2006.01); **G01R 33/26** (2006.01)

CPC (source: EP US)

C01B 32/26 (2017.08 - EP US); **C01B 32/28** (2017.08 - EP US); **C09K 11/65** (2013.01 - US); **G01N 24/006** (2013.01 - US); **G01R 33/032** (2013.01 - EP); **C01P 2002/52** (2013.01 - US); **C01P 2006/60** (2013.01 - US); **C01P 2006/88** (2013.01 - US); **G01N 24/006** (2013.01 - EP); **G01R 33/26** (2013.01 - EP)

Cited by

WO2024041703A1; DE102023122657A1; DE102023121633A1; EP3816645A1

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

DE 202020106145 U 20200722; DE 102020119414 A 20200722; DE 112020003569 T 20200722; DE 2020100648 W 20200722; DE 202020106110 U 20200722; EP 20756754 A 20200722; US 202017629171 A 20200722; US 202418624257 A 20240402