

Title (en)

MULTIVALENT BINDING COMPOSITION FOR NUCLEIC ACID ANALYSIS

Title (de)

MULTIVALENTE BINDUNGSZUSAMMENSETZUNG ZUR ANALYSE VON NUKLEINSÄUREN

Title (fr)

COMPOSITION DE LIAISON MULTIVALENTE POUR L'ANALYSE D'ACIDE NUCLÉIQUE

Publication

**EP 3947731 A4 20220629 (EN)**

Application

**EP 20815612 A 20200522**

Priority

- US 201962852876 P 20190524
- US 201962897172 P 20190906
- US 201916579794 A 20190923
- US 2020034409 W 20200522

Abstract (en)

[origin: WO2020243017A1] Multivalent binding compositions including a particle-nucleotide conjugate having a plurality of copies of a nucleotide attached to the particle are described. The multivalent binding compositions allow one to localize detectable signals to active regions of biochemical interaction, e.g., sites of protein-protein interaction, protein-nucleic acid interaction, nucleic acid hybridization, or enzymatic reaction, and can be used to identify sites of base incorporation in elongating nucleic acid chains during polymerase reactions and to provide improved base discrimination for sequencing and array based applications.

IPC 8 full level

**C12Q 1/6869** (2018.01)

CPC (source: AU EP GB IL KR)

**C12Q 1/6869** (2013.01 - AU IL); **C12Q 1/6874** (2013.01 - EP GB IL KR); **C12Q 2521/101** (2013.01 - IL KR); **C12Q 2537/157** (2013.01 - KR); **C12Q 2563/107** (2013.01 - IL KR); **C12Q 2563/149** (2013.01 - KR)

C-Set (source: AU EP)

AU

**C12Q 1/6869 + C12Q 2521/101 + C12Q 2533/101 + C12Q 2537/149 + C12Q 2565/102**

EP

**C12Q 1/6874 + C12Q 2521/101 + C12Q 2537/157 + C12Q 2563/149**

Citation (search report)

- [X] US 2009186343 A1 20090723 - WANG HONGYI [US], et al
- [X] WO 2009073201 A2 20090611 - PACIFIC BIOSCIENCES CALIFORNIA [US], et al
- [X] WO 2005111240 A2 20051124 - LI COR INC [US], et al
- See also references of WO 2020243017A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2020243017 A1 20201203**; AU 2020285657 A1 20211118; AU 2020285657 B2 20221006; AU 2022291540 A1 20230202; CA 3137120 A1 20201203; CN 113939601 A 20220114; DE 112020002516 T5 20220324; EP 3947731 A1 20220209; EP 3947731 A4 20220629; GB 202115667 D0 20211215; GB 2597398 A 20220126; GB 2597398 B 20240306; IL 287528 A 20211201; IL 287528 B1 20230401; IL 287528 B2 20230801; IL 301380 A 20230501; JP 2022535187 A 20220805; KR 102607124 B1 20231129; KR 20210144929 A 20211130; KR 20230165871 A 20231205; SG 11202112049V A 20211230

DOCDB simple family (application)

**US 2020034409 W 20200522**; AU 2020285657 A 20200522; AU 2022291540 A 20221222; CA 3137120 A 20200522; CN 202080042516 A 20200522; DE 112020002516 T 20200522; EP 20815612 A 20200522; GB 202115667 A 20200522; IL 28752821 A 20211024; IL 30138023 A 20230314; JP 2021561845 A 20200522; KR 20217037728 A 20200522; KR 20237040302 A 20200522; SG 11202112049V A 20200522