



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 21 85 91 74

Classification of the application (IPC):
C07K 19/00, G01N 33/542, G01N 33/68, C07K 14/00, C12N 15/62

Technical fields searched (IPC):
G01N

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	CERMINARA MICHELE ET AL: "Downhill Protein Folding Modules as Scaffolds for Broad-Range Ultrafast Biosensors" <i>JOURNAL OF THE AMERICAN CHEMICAL SOCIETY</i> , 07 May 2012 (2012-05-07), vol. 134, no. 19, DOI: 10.1021/ja301092z, ISSN: 0002-7863, pages 8010-8013, XP093186001 * PG 8010, 8013;figure 1 *	1-9, 11, 15
X	MUÑOZ VICTOR ET AL: "When fast is better: protein folding fundamentals and mechanisms from ultrafast approaches" <i>BIOCHEMICAL JOURNAL</i> GB 01 September 2016 (2016-09-01), vol. 473, no. 17, pages 2545-2559 URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5003694/pdf/bj4732545.pdf , ISSN: 0264-6021, XP093186242 * PG 2545,2549,2552,2554,2555;figures 6,7 *	1-9, 11, 15
A	BOYKEN SCOTT E. ET AL: "De novo design of tunable, pH-driven conformational changes" <i>SCIENCE</i> US 17 May 2019 (2019-05-17), vol. 364, no. 6441, DOI: 10.1126/science.aav7897, ISSN: 0036-8075, pages 658-664, XP093185999 * page 1 - page 2 *	1-9, 11, 15
A	BADASYAN A ET AL: "Probing Possible Downhill Folding: Native Contact Topology Likely Places a Significant Constraint on the Folding Cooperativity of Proteins with ~40 Residues" <i>JOURNAL OF MOLECULAR BIOLOGY, ACADEMIC PRESS, UNITED KINGDOM</i> , 12 December 2008 (2008-12-12), vol. 384, no. 2, DOI: 10.1016/J.JMB.2008.09.023, ISSN: 0022-2836, pages 512-530, XP025609978 * page 513 *	1-9, 11, 15
X	VALLEE-BELISLE A ET AL: "Structure-switching biosensors: inspired by Nature" <i>CURRENT OPINION IN STRUCTURAL BIOLOGY, ELSEVIER LTD, GB</i> , 01 August 2010 (2010-08-01), vol. 20, no. 4, ISSN: 0959-440X, pages 518-526, XP027234415 * page 518 - page 519; figures 1,2 *	1-9, 11, 15

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search The Hague	Date of completion of the search 17 July 2024	Examiner Kosten, Jonas
------------------------------	--	---------------------------

CATEGORY OF CITED DOCUMENTS

- | | |
|---|--|
| X: particularly relevant if taken alone | P: intermediate document |
| Y: particularly relevant if combined with another document of the same category | T: theory or principle underlying the invention |
| A: technological background | E: earlier patent document, but published on, or after the filing date |
| O: non-written disclosure | D: document cited in the application |
| &: member of the same patent family, corresponding document | L: document cited for other reasons |

Disclaimer: this document has been automatically generated using data structured in accordance with WIPO standard ST.36 from the database of search reports of the European Patent Office. For technical reasons, its content and layout may differ from that of the original publication. Only the original published information is legally binding.



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 21 85 91 74

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
A	G. Zhang: "The first-in-class peptide binder to the SARS-CoV-2 spike protein" <i>bioRxiv</i> , 17 June 2020 (2020-06-17), pages 1-15 URL: https://web.archive.org/web/20200328201339if_/https://www.biorxiv.org/content/10.1101/2020.03.19.999318v1.full.pdf , DOI: 10.1101/2020.03.19.999318, XP093162856 * page 2 *	1-9, 11, 15
X,P	NAGPAL SUHANI ET AL: "Downhill (Un)Folding Coupled to Binding as a Mechanism for Engineering Broadband Protein Conformational Transducers" <i>ACS SYNTHETIC BIOLOGY</i> Washington DC ,USA 21 August 2020 (2020-08-21), vol. 9, no. 9, DOI: 10.1021/acssynbio.0c00190, ISSN: 2161-5063, pages 2427-2439, XP093185988 * the whole document *	1-9, 11, 15

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search The Hague	Date of completion of the search 17 July 2024	Examiner Kosten, Jonas
------------------------------	--	---------------------------

CATEGORY OF CITED DOCUMENTS

- | | |
|---|--|
| X: particularly relevant if taken alone | P: intermediate document |
| Y: particularly relevant if combined with another document of the same category | T: theory or principle underlying the invention |
| A: technological background | E: earlier patent document, but published on, or after the filing date |
| O: non-written disclosure | D: document cited in the application |
| & : member of the same patent family, corresponding document | L: document cited for other reasons |

Disclaimer: this document has been automatically generated using data structured in accordance with WIPO standard ST.36 from the database of search reports of the European Patent Office. For technical reasons, its content and layout may differ from that of the original publication. Only the original published information is legally binding.



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 21 85 91 74

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1, 3, 5, 7-9(completely); 2, 4, 6, 11, 15(all partially)

The claims in so far as they relate to a composition with a protein having a target-binding part changing conformation upon target binding and a reporter moiety.

2. claims: 10, 12-14(completely); 2, 4, 6, 11, 15(all partially)

The claims in so far as they relate to a composition for detecting a target, the composition comprising: a plurality of responsive proteins; wherein the plurality of responsive proteins are assembled on to a plurality of substrates through engineered multivalent adhesion at a desired density per substrate to generate a host cell decoy for the target.

None of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the first mentioned in the claims, namely claims: 1, 3, 5, 7-9(completely); 2, 4, 6, 11, 15(partially)

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search	Date of completion of the search	Examiner
The Hague	17 July 2024	Kosten, Jonas

CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone	P: intermediate document
Y: particularly relevant if combined with another document of the same category	T: theory or principle underlying the invention
A: technological background	E: earlier patent document, but published on, or after the filing date
O: non-written disclosure	D: document cited in the application
& : member of the same patent family, corresponding document	L: document cited for other reasons

Disclaimer: this document has been automatically generated using data structured in accordance with WIPO standard ST.36 from the database of search reports of the European Patent Office. For technical reasons, its content and layout may differ from that of the original publication. Only the original published information is legally binding.