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(71) Applicants: **ILLUMINA CAMBRIDGE LIMITED**

[GB/GB]; 19 Granta Park, Great Abington, Cambridge
Cambridgeshire CB21 6DF (GB). **ILLUMINA, INC.**
[US/US]; 5200 Illumina Way, San Diego, California 92122
(US).

(72) Inventors: **ARTIOLI, Gianluca Andrea**; Illumina Cam-

bridge Limited, 19 Granta Park, Great Abington, Cambridge
Cambridgeshire CB21 6DF (GB). **LESSARD-VIGER,**
Mathieu; Illumina, Inc., 5200 Illumina Way, San Diego,
CA 92122 (US). **MATHER, Brian D.**; Illumina, Inc., 5200
Illumina Way, San Diego, California 92122 (US). **VON**
HATTEN, Xavier; Illumina Cambridge Limited, 19 Gran-
ta Park, Great Abington, Cambridge Cambridgeshire CB21
6DF (GB).

(74) Agent: **FORRESTERS IP LLP**; Skygarden, Erika-Mann-

Str. 11, 80636 Munich (DE).

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(54) Title: FUNCTIONALIZED PLASMONIC NANOSTRUCTURES

(57) Abstract: An example of a functionalized plasmonic nanostructure includes a plasmonic nanostructure core; a polymeric hydrogel attached to the plasmonic nanostructure core, the polymeric hydrogel having a thickness ranging from about 10 nm to about 200 nm; and a plurality of primers attached to side chains or arms of the polymeric hydrogel, wherein at least some of the plurality of primers are attached to the polymeric hydrogel at different distances from the plasmonic nanostructure core.



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