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(54) **Title:** ILLUMINATION SYSTEMS FOR NUCLEIC ACID SEQUENCING

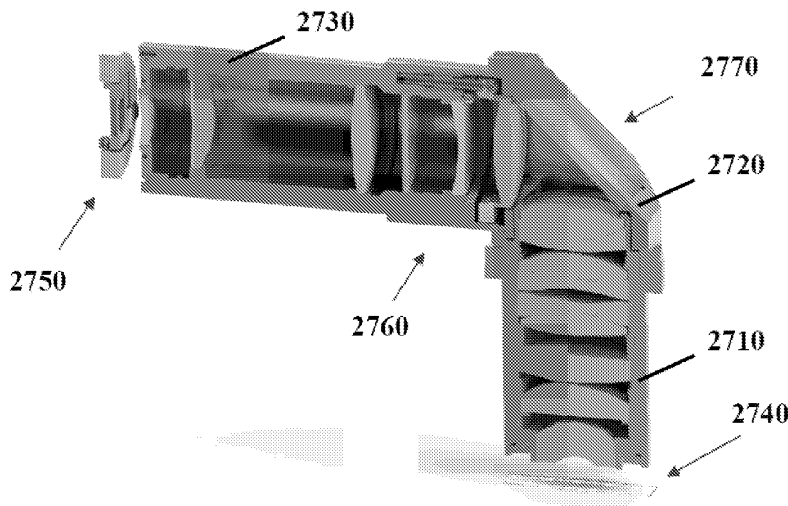


FIG. 27

(57) **Abstract:** The present disclosure describes illumination methods and systems for illumination and sequencing applications that can be utilized for, for example, microscopy and sequencing platforms. The methods and systems of the present disclosure can provide wide area, flat illumination, which can reduce error and improve system throughputs.

[Continued on next page]

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