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(54) **Title:** IMPROVED REFLECTION MODE DYNODE

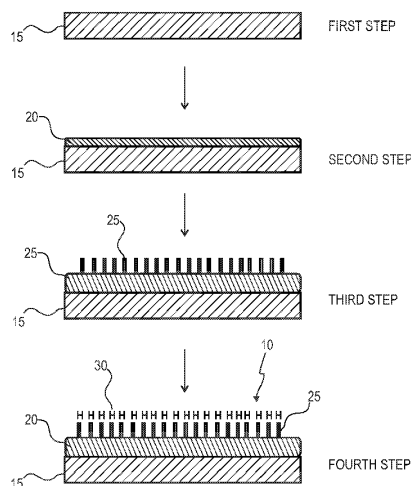


FIG. 1

(57) **Abstract:** The present invention provides a device configured to convert or amplify a particle, the conversion or amplification being reliant on the impact of a particle on a surface of the device causing the emission of one or more secondary electrons from the same surface, wherein the device comprises a carbon-based layer capable of secondary electron emission upon impact of a particle. The surface may be used to convert, for example, an ion into an electron signal, or an electron signal into an amplified electron signal. The invention is particularly applicable to conversion or amplification dynodes.

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