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(54) Title: A DOUBLE-COLLECTOR UNI-TRAVELLING-CARRIER PHOTODIODE

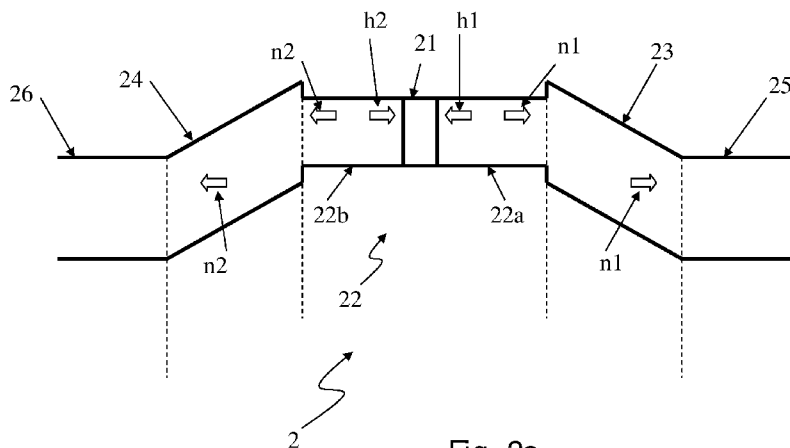


Fig. 2a

(57) Abstract: A uni-travelling carrier (UTC) photodiode comprising an absorption region (22) of p-type doped material. The photodiode further comprises a first collector layer (23) and second collector layer (24) wherein the absorption region (22) is located between the first collector layer (23) and the second collector layer (24) and a contact layer (21) made of p-type material is located within the absorption region (22). By this double collector UTC structure the responsivity bandwidth trade-off is improved since the current caused by the movement of the electrons (n1,n2) generated as a result of light absorption in the absorption region (22) is directed towards two separate collectors (23, 24).

