V. PINNED BURIED PNIP PHOTODIDOE TYPE SOLAR CELL

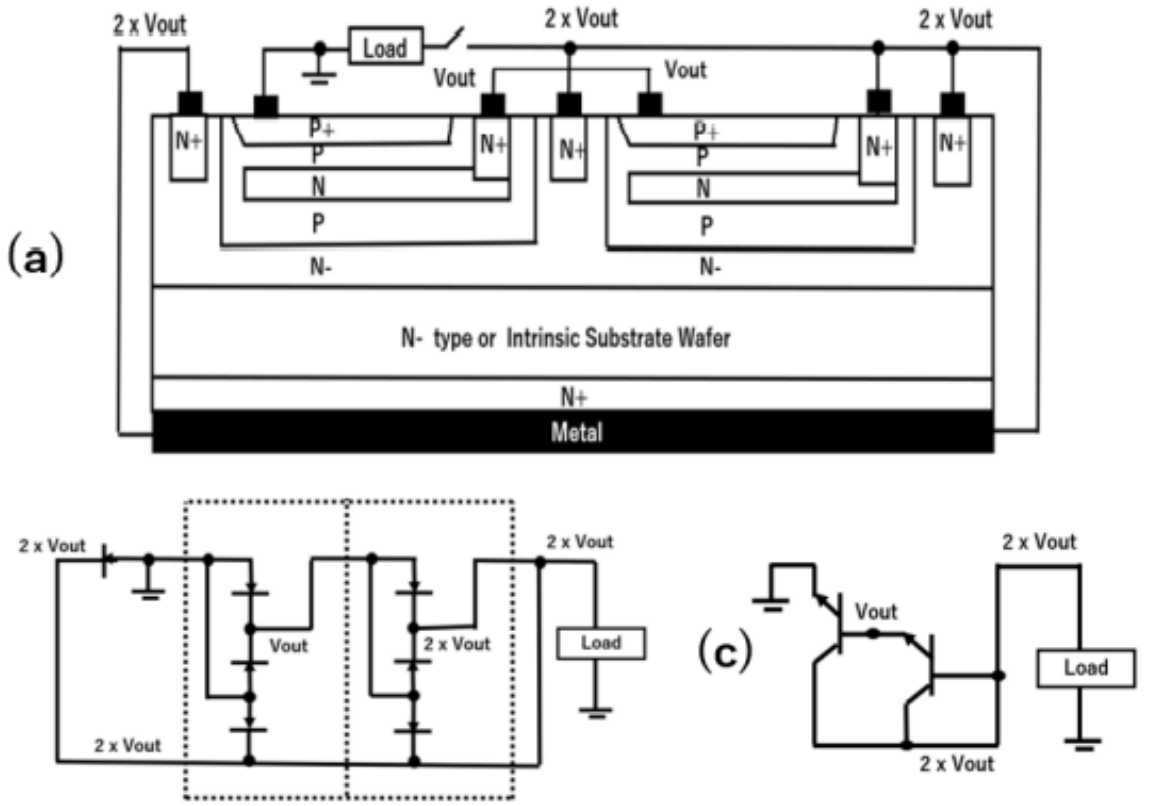

Fig. 12 (a)Two Units of Triple Junction Pinned Buried P+PNPIP+ Photodiode type Solar Cells in series with (b) a diode circuit formation and (c) a two- photo-transistor formation which can be fabricated by Bipolar Tr Process.

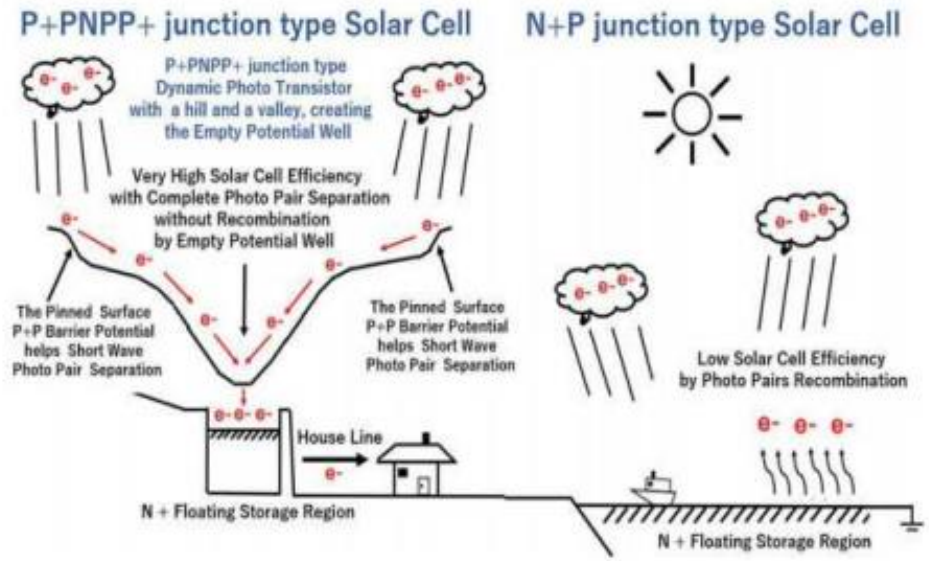

Fig. 14 Analogy of rain drops and photo electrons under the sunshine.

In summary, the most important feature of Pinned Buried Photodiode is the short-wave blue light sensitivity. Sun light has a great amount of short-wave blue light energy. Pinned Buried Photodiode type solar cell is similar to a very efficient rain-drops collecting system of a mountain hill and a valley with a storage dam while the simple N+P single junction type conventional solar cell is like collecting rain-drops at the open sea where most of rain drops are wasted. See Fig.14.