**BY E-MAIL / COURIER**

**File No.75/2023-Opinion**

29.09.2023

M/s. Redington Limited,

Block 3, Plathin, Redington Tower,

Inner Ring Road, Saraswathy Nagar West,

4thStreet, Puzhuthivakkam,

Chennai – 600 091.

Attn.: Mr. N.V. Raghuraman, Senior Manager - Imports

E-mail: <raghuraman.nv@redingtongroup.com>

C.C.: <ramanujam.v@redingtongroup.com> / <prasanna.r@redingtongroup.com>

Sir,

***Sub.: Opinion with regard to Import of Solar Modules and availment of Concessional Duty.***

1. This is in continuation of our opinion of even number given on 11.05.2023 on the above subject.

2. In the above opinion we have answered all the queries raised by the querist and in respect of classification alone, we have opined that the solar panels with diodes will qualify to be classified under 8501 of the schedule to the Customs Tariff Act in the light of the HSN explanatory notes and accordingly, indicated that any claim for benefit under Free Trade Agreement notifications will be subject to this.

3. Subsequent to the above opinion, the querist has made available declarations as well as brochures from the suppliers / manufacturers to the effect that these panels contain only bypass diodes in the junction boxes and as per the clarification given by the CBIC in April 2018, they get classified still under 8541 only. It was also indicated that only when bypass diodes and blocking diodes are present in the panel then, the product needs to be classified under 8501.

-2-

4. We have gone through the additional information provided by the querist. As per the supplier / manufacturer’s declaration and brochure, the panels under reference contain only bypass diodes. In the Trinasolar’s Installation Manual, in para 12, the following is stated.

“**12. BYPASS DIODES AND BLOCKING DIODES**

Partial shading of an individual module can cause a reverse voltage across the shaded PV module. Current is then forced go through the shaded area by the other modules. **When a bypass diode is wired in parallel with the series string, the forced current will flow through the diode and bypass the shaded PV module**, thereby minimizing module heating and array current losses.

Currently, Trina Solar PV modules are equipped with bypass diodes in the junction box. The diode type is SB3040DY, (rated 40V PIV minimum, 16A minimum, 3 provided). Do not try to open the junction box to change the diodes even if it malfunctions.”

5. From the above information, it is clear that the current flow is controlled by the diode to bypass the shaded PV module, thereby minimizing the module heating and current loss.

6. The HSN explanatory notes specifically states that heading 8541 does not cover panels or modules equipped with elements, however simple (for e.g., diodes **to control the direction of the current**). Since in the present case, it appears that the bypass diode is required to achieve the above purpose, in our view, it will meet the conditions for exclusions from 8541.

7. At the same time, it is noticed that in 2018, WCO issued a classification ruling for solar modules with junction boxes. It is stated that in the junction box there is one bypass diode **to protect the cells**. Two connection solar cables of a length of 900 mm and having solar connectors are also connected to the terminals of the strings inside the junction box. That particular product based on the description mentioned above was sought to be classified under 8541 40 by the WCO.

8. It appears that based on the above ruling, CBIC came out with instructions bearing No.8/2008 dated 06.04.2008 (which is not available in the public domain) clarifying that solar panel or modules equipped with bypass diodes are to be classified under 8541 and solar panels or modules equipped with blocking diodes are to be classified under 8501 and further solar panels or modules equipped with blocking diodes and bypass diodes are to be classified under 8501.

-3-

9. Therefore, in the light of the above instruction and the clarification provided by the suppliers / manufacturers, it can be treated that these solar modules will fall under 8541 of the Schedule to the Customs Tariff Act. Consequently, the benefit claimed by the querist under Free Trade Agreement notifications will be permissible.

10. However, it is to be noted that it appears that SIIB carried out tests on the solar panels imported earlier and confirmed that the subject solar panels are capable of supplying power directly to an external load, such as DC motor / bulb.

11. Thus, it becomes a question of correct determination of the functions of the product imported in each consignment. Upon tests that may be carried out by the customs, if it is established that the presence of diode meets the conditions stipulated in the CBIC instructions issued in 2018, then, the benefit under FTA can be claimed.

**S. MURUGAPPAN**

sm/ss

**Disclaimer:-** The above opinion is provided based on the information and documents made available to us by the queriest and further based on the laws and rules prevalent as on date and the understanding of such provisions by the author and is meant for the private use of the person to whom it is provided without assuming any liability for any consequential action taken based on the views expressed here.