ABSTRACT

Provided in the embodiments of the present disclosure are an address translation method, a fast mapping table construction method, a device, a storage medium and a program product. In an embodiment of the present disclosure, the address translation method comprises: constructing a first RMAP table adapted to an EPT, the first RMAP table storing address information of the last-level page table entry respectively corresponding to at least one GPA in the EPT; establishing a fast mapping relationship from GPAs to HPAs on the basis of first RMAP table so as to implement fast address translation from the GPAs to the HPAs; and further, creating a second RMAP table for the EPT, the second RMAP table storing address translation information from at least one HPA to a corresponding GPA to establish a fast mapping relationship from the HPAs to the GPAs so as to implement fast address translation from the HPAs to the GPAs. Bidirectional fast mapping can be implemented on the basis of the first RMAP table and the second RMAP table, so as to improve address translation efficiency.

Fig. 1a