

Title (en)  
MATERIAL ACCELERATOR FOR HANDLING RED AND BLACK TREES

Title (de)  
MATERIALBESCHLEUNIGER FÜR ROTE UND SCHWARZE BÄUME

Title (fr)  
ACCELERATEUR MATERIEL POUR LA MANIPULATION D'ARBRES ROUGES ET NOIRS

Publication  
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Application  
**EP 14725486 A 20140522**

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Abstract (en)  
[origin: WO2014195141A1] The invention relates to a material accelerator for handling red and black trees, each node of a tree including a binary color indicator, a key, and the addresses of a parent node and of two children nodes, said accelerator including: at least two registers, referred to as node registers (RN1, RN2), for storing the entire data fields of two nodes in a tree; and logic units (UC, UT) configured to receive, from a processor (PROC), at least one input data item selected from a node address in a tree and a so-called reference key and at least one command to be executed; in order to execute said command by combining elementary commands on the data stored in said node registers and to provide the processor with at least one output data item including the address of a node. The invention also relates to a processor and a computer system including such a material accelerator.

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