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(54) **BUFFER STRUCTURE FOR IMMERSED SERVER SLIDE RAIL AND WORKING METHOD**

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(57) **ABSTRACT**

The present invention relates to a buffer structure for immersion server slide rail and a working method therefor, which belongs to the field of server slide rails. The buffer structure is composed of a buffer tank, buffer chambers, small holes, guide pins, elastic members and a buffering block. When the slide rail is open, due to the fact that the elastic members undergo a loss of compression, the guide pins and the buffering block are pushed to move outwards, the server's liquid coolant enters the buffer chambers through the small holes in the tail portion of the buffer tank and fills up the chambers, and the buffering block stops moving when abutting against the first position-limiting stopper; whereas when the slide rail is closed, the tail portion of the first moveable rail abuts against the buffering block to generate an inward thrust, pushing the buffering block and the guide pins to move inwards, and the guide pins press against the elastic members and the liquid coolant in the buffer chambers, thereby forming a buffer. In this way, the present invention is made to be structurally compact, rational, easy to operate, enabling automatic buffering, thereby preventing collision damage that may be caused by excessive impact during operation, reducing accidental damage that may be caused by undesirable operation, and prolonging the server's lifespan.