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(54) Title: MULTI-INPUT FLOATING POINT NUMBER PROCESSING METHOD AND APPARATUS, PROCESSOR AND COMPUTER DEVICE

(54) 发明名称: 多输入浮点数处理方法、装置、处理器及计算机设备

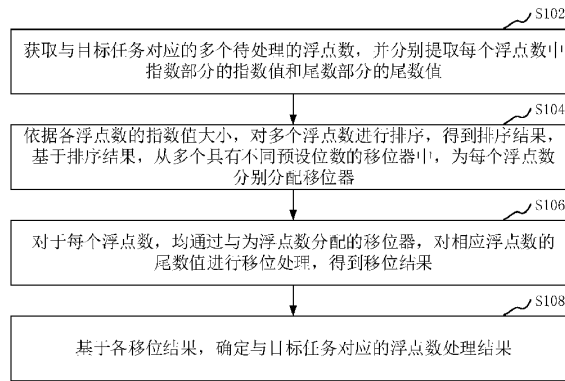


图 1

- S102 Obtain a plurality of floating point numbers to be processed corresponding to a target task, and respectively extract an exponent value of an exponential part and a mantissa value of a mantissa part in each floating point number
- S104 Sort the plurality of floating point numbers according to the exponent value of each floating point number to obtain a sorting result, and on the basis of the sorting result, respectively allocate to each floating point number a shifter from a plurality of shifters having different preset digits
- S106 For each floating point number, perform shift processing on the mantissa value of the corresponding floating point number by means of the shifter allocated to the floating point number to obtain a shift result
- S108 On the basis of each shift result, determine a floating point number processing result corresponding to the target task

(57) Abstract: A multi-input floating point number processing method executed by a computer device, the method comprising: obtaining a plurality of floating point numbers to be processed corresponding to a target task, and respectively extracting an exponent value of an exponential part and a mantissa value of a mantissa part in each floating point number (S102); sorting the plurality of floating point numbers according to the exponent value of each floating point number to obtain a sorting result, and on the basis of the sorting result, respectively allocating to each floating point number a shifter from a plurality of shifters having different preset digits (S104);

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for each floating point number, performing shift processing on the mantissa value of the corresponding floating point number by means of the shifter allocated to the floating point number to obtain a shift result (S106); and on the basis of each shift result, determining a floating point number processing result corresponding to the target task (S108).

(57) 摘要: 一种多输入浮点数处理方法, 由计算机设备执行, 该方法包括: 获取与目标任务对应的多个待处理的浮点数, 并分别提取每个浮点数中指数部分的指数值和尾数部分的尾数值(S102); 依据各浮点数的指数值大小对多个浮点数进行排序, 得到排序结果, 基于排序结果, 从多个具有不同预设位数的移位器中, 为每个浮点数分别分配移位器(S104); 对于每个浮点数, 均通过为浮点数分配的移位器, 对相应浮点数的尾数值进行移位处理, 得到移位结果(S106); 基于各移位结果, 确定与目标任务对应的浮点数处理结果(S108)。