

Coprocessor for computing the Gaussians difference function comprises an input memory block, the input of which is the coprocessor's input; a first filtering block, the input of which is connected to the output of the input memory block; an intermediate memory block, whose input is connected to the output of the first filtering block, a second filtering block, whose input is connected to the output of the intermediate memory block, and a result memory block, whose output serves as the coprocessor's output. The output of the second filtering block is connected to the input of the result memory block. Each of the filtering blocks is implemented as a series connection of a first bandpass filter - whose input is the input of the filtering block - a buffer memory block, and a second bandpass filter - whose output is the output of the filtering block.