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**Concept of an active anechoic multicellular layer: a dynamic approach for the detection of incidental plane waves**

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In previous paper we propose the concept of an active anechoic multicellular layer. The layer wraps the body of a submarine and the animation of this layer with an adequate algorithm makes the submarine anechoic to incidental sonar plane waves. The electronic architecture of this multicellular layer is based on a systolic model, more precisely on the architecture of a SIMD parallel computer (Single Instruction Multiple Data). Each cell of the layer acts independently and communicates by direct electronic links with its neighbors. All the cells do the same control algorithm on local data. The key of the anechoicity of the layer is based on a parallel linear real time algorithm for the detection of the incident plane waves. In this article, we propose a new approach for detection of incident plane waves, this approach is based on a parallel dynamic estimation of the directions of the incidental waves. We also present a set of results that illustrate the improvement of the anechoicity of the layer.