

Soundproof panel of a gas turbine engine includes skin casings - internal and external, between which sequentially are arranged interconnected layers of filler, where each layer of filler is corrugated, each layer of filler is made with a thickness of not less than the thickness of the inner or outer casings, the inner lining is made as sound-permeable and is directed towards the sound source, the outer skin is made soundproof, each of these layers of filler alone is as parallel one-way adjacent rows of acoustically reflective elements - reflectors, made in the form of surfaces of the second order, these corrugated layers of filler are fixed in adjacent rows of acoustically reflective elements by connecting curved surfaces, and normally to those there are made technological grooves, wherein the corrugated layers are separated by other filler sound-absorbing intermediate layers, disposed in the focus of each of the acoustically reflective surfaces of corrugated layers, wherein the thickness ratio of the layers of mentioned corrugated filler is selected according to the Fibonacci number series as close to 1,618.