Abstracts

A Mechanism for High-Frequency Electromagnetical Field-Induced Biological Damage?

B.O. Nilsson and L.E. Pettersson. "A Mechanism for High-Frequency Electromagnetical Field-Induced Biological Damage?." 1979 Transactions on Microwave Theory and Techniques 27.6 (Jun. 1979 [T-MTT]): 616-618.

It is shown that local eletrical fields up to about 100 times larger than average fields can be induced around microscopic wedge-shaped boundaries between regions with different dielectric constants likely to be present in the human body. It is pointed out that this phenomenon might explain biological effects at low radiation power levels especially in the case of low duty-cycle pulsed radiation.

❑ Return to main document.