Peculiarities of use of millimeter- and submillimeter-wave diffractive optics in active radio vision systems

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Abstract

The end of the 20th century and the beginning of the 21st century is characterized by a sharp increase in the number of terrorist attacks with explosive devices and weapons, which take place in most countries of the world. The largest number of such attacks occur in air transport and involve explosive devices, firearms and edged weapons. The standard systems available at high-security checkpoints include metal detectors for personal inspection and X-ray devices for baggage control. However, such systems are not effective for detecting plastic or ceramic guns and knives, explosives, especially if they are hidden on the human body.

Keywords: diffractive optic, millimeter- and submillimeter-wave, radio vision system, metal detector, X-ray device, baggage control.

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Access full text (in Russian)

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