For the reported period the researchers focused on several problems on the propagation of electromagnetic and acoustic waves in periodic and disordered media. (1) Localization properties of some discrete models for light, (2) Existence of gaps and exponential localization for the Anderson type models for periodic and disordered acoustic dielectric media and (3) Band-gap structure for periodic two component dielectric and acoustic media.
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FINAL TECHNICAL REPORT
on the research project
"Localization Phenomenon in Some
Random Classical Systems"

A. Figotin

July 20, 1994
For the reported period I focused on several problems on the propagation of electromagnetic and acoustic waves in periodic and disordered media.

- Localization properties of some discrete models for light, [1,2]
- Existence of gaps and exponential localization for the Anderson type models for periodic and disordered acoustic and dielectric media, [3,6,7]
- Band-gap structure for periodic two component dielectric and acoustic media, [4,5,8]

The detailed information on the work done was presented in the annual reports as well as copies of the papers and preprints which have been already sent to the Air Force Office of Scientific Research.
Papers Published and Submitted

Journal of Statistical Physics, 66, 1599-1612, 1992

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