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COMPOSITION FOR THE IMPREGNATION OF WOOD

V. T. Lebedev, et al

Foreign Technology Division Wright-Patterson Air Force Base, Ohio

17 November 1972

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FOREIGN TECHNOLOGY DIVISION



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V. T. Lebedev, V. Ya. Novikov, et al.



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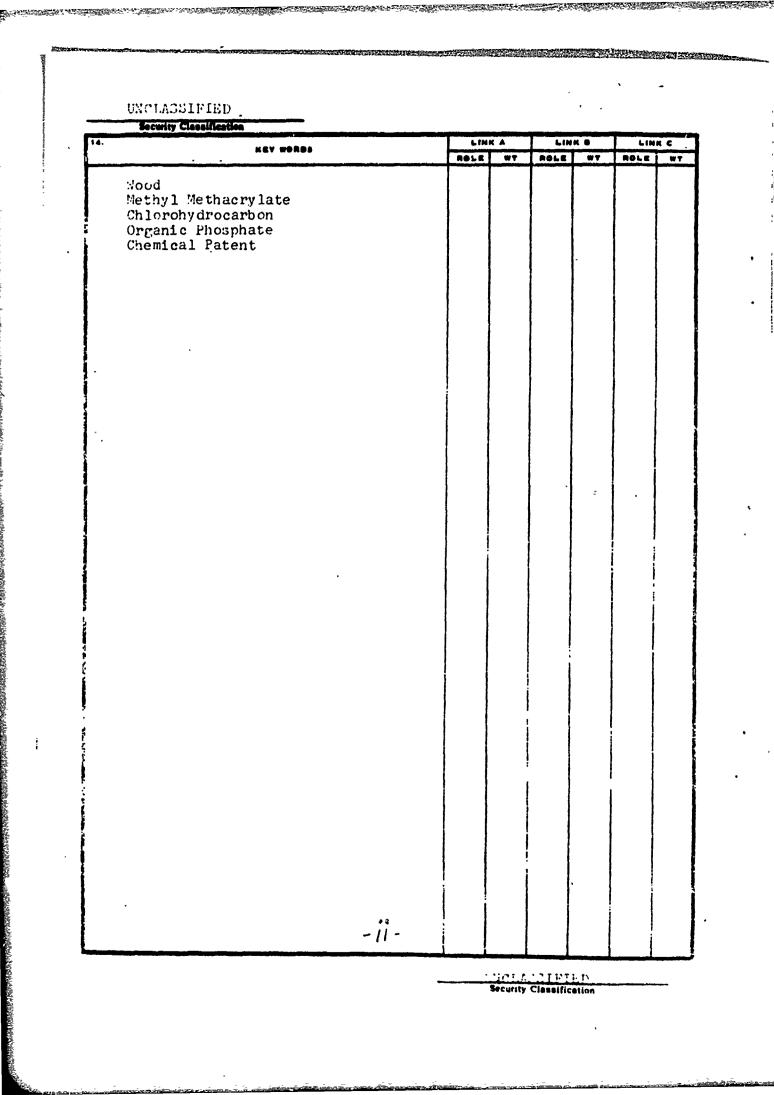
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EDITED TRANSLATION

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By: V. T. Lebedev, V. Ya. Novikov, et al.

English pages: 2

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Translated by: Charles T. Ostertag Jr.

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PREPARED BY:

TRANSLATION DIVISION FOREIGN TECHNOLOGY DIVISION WP-AFB, OHIO.

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COMPOSITION FOR THE IMPREGNATION OF WOOD

V. T. Lebedev, V. Ya. Novikov,
S. P. Sheremetov, F. V. Dolinskiy,
G. V. Shiryayeva, V. L. Karpov,
V. V. Blinov, and V. I. Toropov

Compositions of monomers are known for strengthening wood by means of impregnation and polymerization with ionizing radiation. The known compositions of monmomers do not yield the necessary strength of wood and parts made from it.

The purpose of the invention is increasing the durability of wood and lengthening the service period of parts made from it by means of impregnation with a composition containing methyl methacrylate in a quantity of 70-93% and $\beta\beta$ -dichloroethyl ether of vinyl phosphonic acid in a quantity of 30-7% of the volume of the mixture.

The procedure is the following. The wood is evacuated, impregnated with a mixture of monomers of methyl methacrylate and $\beta\beta$ -dichloroethyl ether of vinyl phosphonic acid in a ratio of 3:1, and polymerized by means of ionizing radiation, for example, the gamma-rays of Co⁶⁰ in an inert medium at an irradiation dose of 3-5 Mrad.

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Subject of Invention

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A composition for the impregnation of wood on a base of monomers is *characterized* by the fact that for the purpose of increasing the durability of wood the composition contains 70-93%methyl methacrylate and 30-7% $\beta\beta$ -dichloroethyl ether of vinyl phosphonic acid.

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