Wood modification by etherification with epoxides preceded by solvent drying



From the literature (esp. the work of Rowell in the 70's) it can be derived that for wood modification esterification is more effective than etherification. However, we found out that if the wood is first dried with a solvent that swells the wood to approximately the same rate as water would do, etherification with an epoxide can provide the wood with excellent properties which are comparable to or better than esterification f.i. by acetylation. This principle has been patented.

At the moment we are working on development of a process for high end applications. These include wood for decks on yachts.

Title of project: MEXEW

Support Program/Supported by/Sponsored by: TNO-CO

Duration: 3 years

Partner: yacht deck builder, wood trader, wood preservation industry, joinery producer **Responsible for project/Project Leader/Contact**: Delft Patents and TNO / ir. E.P.J. Beckers /

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