ABSTRACT

A method for depolymerization of lignin by laccases

The present invention relates to a method for depolymerization of lignin, comprising a step for oxidizing non-phenolic lignin by putting into presence, in at least one solvent, non-phenolic lignin, laccase, redox mediator and a source of oxygen, whereby a mixture comprising oxidized non-phenolic lignin is obtained, and a step for depolymerization of the oxidized non-phenolic lignin thereby obtained, by adding an oxidizer, said non-phenolic lignin being obtained from phenolic lignin by functionalization of phenol functions of said phenolic lignin.

Figure: none.

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A method for depolymerization of lignin by laccases

The present invention relates to a method for depolymerization of lignin, comprising a step for oxidizing non-phenolic lignin by putting into presence, in at least one solvent, non-phenolic lignin, laccase, redox mediator and a source of oxygen, whereby a mixture comprising oxidized non-phenolic lignin is obtained, and a step for depolymerization of the oxidized non-phenolic lignin thereby obtained, by adding an oxidizer, said non-phenolic lignin being obtained from phenolic lignin by functionalization of phenol functions of said phenolic lignin.

Figure: none.