

Title (en)
ENVIRONMENTALLY COMPATIBLE POLE AND PILING

Title (de)
UMWELTVERTRÄGLICHER PFOSTEN UND PFAHL

Title (fr)
POTEAUX ET PIEUX COMPATIBLES AVEC L'ENVIRONNEMENT

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Application
EP 00945070 A 20000630

Priority
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Abstract (en)
[origin: WO0102662A2] An elongated support structure (50, 193, 193a, 193b, 193c, 193d, 193e, 218) suitable for outdoor use as a utility pole, post, or piling and having a multiple layered, composite construction, and a method for manufacturing such an elongated support structure (50, 193, 193a, 193b, 193c, 193d, 193e, 218). The elongated support structure (50, 193, 193a, 193b, 193c, 193d, 193e, 218) includes a hollow core (68, 194, 194a, 194b, 204, 210) formed of a homogeneous mixture of a matrix resin and a fibrous strengthening material. The core (68, 194, 194a, 194b, 204, 210) is surrounded by a reinforcing layer (72, 206, 212) of fiberglass and a binding resin. An expanded foam resin layer (74, 207, 209, 215, 217) is disposed on the exterior of the reinforcing layer (72, 206, 212). The interior of the core (68, 194, 194a, 194b, 204, 210) may be subdivided into smaller longitudinal compartments (199, 200, 201, 202, 203, 205) by a structural divider (196, 196a, 196b). The support structure (50, 193, 193a, 193b, 193c, 193d, 193e, 218) may have different cross-sectional configurations, utility poles using the elongated support structure (50, 193, 193a, 193b, 193c, 193d, 193e, 218) include accessories and attachments, such as cross arms (56, 220), cross arm mounting brackets (58, 222), guy wire brackets (236), power line connection brackets (130, 344, 346), and end caps (60, 64, 66, 228, 240, 242, 360). Extremely long support structures (218) are assembled with coupling accessories (268, 278) from shorter support sections (230, 230a, 230b).

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