Title (en)

GLASS FIBER MANUFACTURING PROCESS AND PLANT.

Title (de)

VERFAHREN UND ANLAGE ZUR HERSTELLUNG VON GLASFASERN.

Title (fr)

PROCEDE ET INSTALLATION DE PRODUCTION DE FIBRES DE VERRE.

Publication

EP 0680459 A1 19951108 (DE)

Application

EP 94904125 A 19940107

Priority

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Abstract (en)

[origin: US5690715A] PCT No. PCT/DE94/00007 Sec. 371 Date Jul. 24, 1995 Sec. 102(e) Date Jul. 24, 1995 PCT Filed Jan. 7, 1994 PCT Pub. No. WO94/17004 PCT Pub. Date Aug. 4, 1994In a process for producing insulating materials with environmentally safe binding components, a long-chain starch is used as binder, besides silicone. The starch is heated up to 50 DEG to 60 DEG C., held at this temperature and sprayed on the glass fibers separately from the silicone; 6 to 8% binder, consisting of starch and silicone, are used, then a spun-glass mat or slab may be shaped and dried at about 180 DEG C. A spun-glass mat (16), insulating mat or slab or adsorber is thus obtained which surprisingly is water-proofed and held together exclusively by starch, resin and silicone, which may be used without any problems and has a uniform bulk density throughout. In the plant (1) provided for that purpose, supply rings for water (9), for starch (10) and for silicone (11) are provided. The nozzles (13) for the supply ring 10 have a larger opening and separation edges. The premixing container (17) and the supply pipe (15) are heatable or heat-insulated. In a further embodiment, an emulsion is formed from silicone resin, silicone oil, a dust binder and the starch, is atomized at 18 DEG to 200 DEG C. and sprayed onto the passing stream of glass fibers.

IPC 1-7

C03C 25/02

IPC 8 full level

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