

Title (en)  
AN ACID COLLOID IN A MICROPARTICLE SYSTEM USED IN PAPERMAKING

Title (de)  
SAURES KOLLOID IN EINEM MIKROTEILCHENSYSYSTEM FÜR DIE PAPIERHERSTELLUNG

Title (fr)  
COLLOIDE ACIDE DANS UN SYSTEME MICROPARTICULAIRE UTILISE EN PAPETERIE

Publication  
**EP 1173641 A1 20020123 (EN)**

Application  
**EP 99946856 A 19990908**

Priority  
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• US 10137798 P 19980922

Abstract (en)  
[origin: WO0017451A1] A microparticle system for use as a retention and drainage aid in the production of alkaline and acid paper products comprises a HMW flocculant polymer (6), an acid colloid (7), and a coagulant or a MMW flocculant (5). The acid colloid (7) comprises an aqueous solution of a water soluble polymer or copolymer of melamine aldehyde, preferably melamine formaldehyde, and is present in an amount ranging between 0.0005 % to 0.5 % by weight based on the dry weight of the solids in the furnish. The HMW flocculant polymer (6) may be added to stock or furnish after the fan pump; and prior to the pressure screen (2); the acid colloid (7) may be added to the stock after the pressure screen (2), and the coagulant/MMW flocculant (5) may be added prior to the fan pump (1). Alternatively, this sequence of chemical additions can be changed, i.e. the acid colloid (7) can be added prior to or after the fan pump (1) or prior to the pressure screen (2). Addition of the microparticle system to the paper furnish improves retention, drainage and sheet formation during the papermaking process.

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