

Abstract

In a process for thermal separation of a solution composed of thermoplastic polymer and solvent, in which the solution is heated under pressure above the critical point of the solvent and then decompressed into a vessel (5) so as to form a polymer-rich phase and a low-polymer phase, the polymer-rich phase being supplied to a second vessel (8)

a) a pressure jump on entry into the second vessel leads to a thermal flash in the second vessel, the polymer part of the heavy phase rising to at least 70%, especially more than 80%; and

b) the resulting polymer-rich solution is supplied - especially distributed over at least a portion of the length of a stirrer shaft - which is within the same vessel space and which heats the polymer composition by mechanical kneading energy with the effect that the polymer content rises to >70%, particularly >90%.

(Figure 2)