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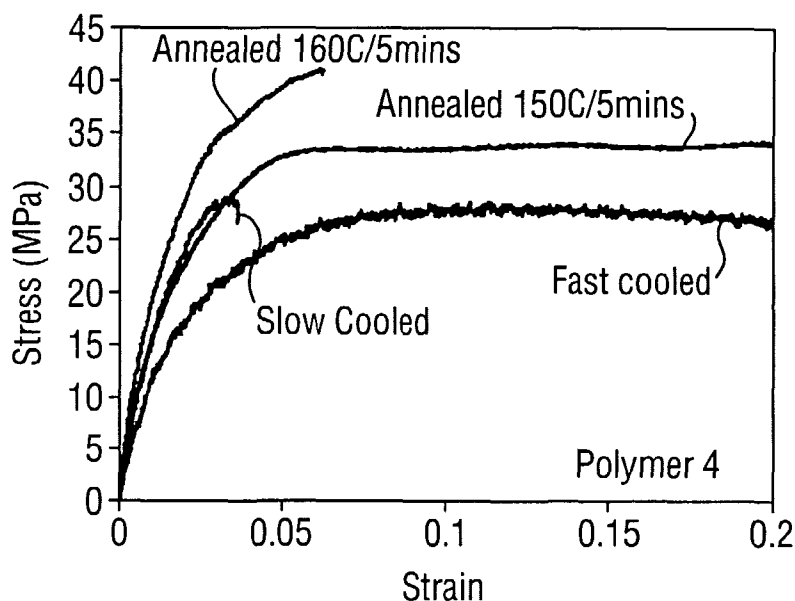
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(54) Title: PROCESS FOR FABRICATING POLYPROPYLENE SHEET



(57) Abstract: A process for production of a monolithic article from a web of fibres of oriented polypropylene homopolymer or copolymer having a weight average molecular weight (M_w) of at least 250,000 includes the steps of subjecting the web to elevated temperature and pressure sufficient to melt a proportion of the polymer and compact it, and thereby yielding an oriented phase and a matrix phase, and effecting a heat treatment selected from (i) subjecting the compacted web to a retarded rate of cooling down to a lower temperature at or below the temperature at which the recrystallisation of the matrix is complete; and (ii) annealing the compacted web at an annealing temperature within 15 °C of the temperature at which the matrix phase is completely melted. The resultant articles have good stiffness and strength, and acceptable ductility, yet corresponding articles made with polypropylene of lower M_w are brittle.



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