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Flow of a power-law fluid with memory past an infinite plate

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Abstract

We examined the flow of a power law fluid with a non-constant relaxation λt^b past an infinite plate. When λ is zero the fluid is pseudoplastic and when the power law exponent is 1, the fluid is a Maxwell fluid. It is shown that the problem has a solution when $0 < n \le 1$. Moreover, we show that momentum penetration decreases with λ .