ON A PARTICULAR FIRST ORDER NONLINEAR DIFFERENTIAL SUBORDINATION. I

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Abstract. We find conditions on the complex-valued functions B, C, D in unit disc U and the positive constants M and N such that

$$|B(z)zp'(z) + C(z)p^2(z) + D(z)p(z)| < 1$$

implies $|p(z)| < M$, where p is analytic in U, with $p(0) = 0$.

MSC 2000. 30C80.

Key words. Differential subordination, dominant.

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