PARTIAL SUMS OF CERTAIN INTEGRAL OPERATOR ON HARMONIC UNIVALENT FUNCTIONS

SAURABH PORWAL	extsuperscript{1}, B.A. FRASIN	extsuperscript{2} AND AJAY SINGH	extsuperscript{3}

Abstract. The purpose of the present paper is to study conditions under which the partial sums of multiplier integral operator of function in the class $HP(\alpha)$, $(0 \leq \alpha < 1)$ consisting of harmonic univalent functions $f = h + \overline{g}$ for which $\text{Re}\{h'(z) + g'(z)\} > \alpha$ belong to similar class $HP(\beta)$, $(0 < \beta < 1)$. It is worthy to note that our results improve and generalized a number of recent results on partial sums of functions of bounded turning.

Received 23 July 2012

\textsuperscript{1,3} Department of Mathematics, UIET, CSJM University, Kanpur-208024, (U.P.) India,
\textsuperscript{2} Faculty of Science, Department of Mathematics, Al al-Bayt University, 130095 Mafraq, Jordan,
E-mail address: \textsuperscript{1} saurabhjcb@rediffmail.com; \textsuperscript{2} bafrasin@yahoo.com; \textsuperscript{3} ajaysingh0044@gmail.com

2000 Mathematics Subject Classification. 30C45, 26D05.
Key words and phrases. Harmonic, Univalent, Partial sums.

145