

## ANALYTIC FUNCTIONS DEFINED BY A PRODUCT OF EXPRESSIONS HAVING GEOMETRIC MEANING

F. M. JIMOH AND K. O. BABALOLA

*Abstract.* We define a new class,  $\mathcal{J}_n^\alpha(\beta)$ , of analytic functions by a product of certain expressions having geometric meaning. We establish univalence of the new class, obtain its integral representations, sufficient inclusion conditions and coefficient inequalities. Examples are given.

*Mathematics subject classification (2010):* 30C45.

*Keywords and phrases:* Bazilevic functions, product of expressions having geometric meaning, bounded turning, starlike, analytic and univalent functions.

### REFERENCES

- [1] S. ABDULHALIM, *On a class of analytic functions involving Salagean differential operator*, Tamkang J. Math., **23**, (1) (1992), 51–58.
- [2] K. O. BABALOLA, *On  $\lambda$ -Pseudo-Starlike functions*, Journal of Classical Analysis, **3**, (2) (2013), 137–147.
- [3] K. O. BABALOLA AND T. O. OPOOLA, *Iterated integral transforms of Caratheodory functions and their applications to analytic and Univalent functions*, Tamkang Journal of Mathematics, **37**, (4) (2006), 355–366.
- [4] K. O. BABALOLA AND T. O. OPOOLA, *On the Coefficients of a Certain Class of Analytic Functions*, Advances in Inequalities for Series, (2008), 1–13.
- [5] T. O. OPOOLA, *On a new subclass of univalent functions*, Mathematica (Cluj) Tome, **36**, (59), no. 2, (1994), 195–200.
- [6] G. S. SALAGEAN, *Subclasses of univalent functions*, Lecture Notes in Mathematics. Springer-Verlag, Berlin, Heidelberg and New York, **1013**, (1983), 362–372.
- [7] R. SINGH, *On Bazilevic functions*, Proc. Amer. Math. Soc., **38**, (1973), 261–271.