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de México, Mexico City, Mexico, *On some properties
of families of functions in $(C_b(X, \mathbb{C}), \beta)$.*

ABSTRACT. Let $(C_b(X, \mathbb{C}), \beta)$ be the algebra of all continuous bounded complex valued functions on a completely regular Hausdorff space with the usual algebraic operations and the strict topology β . Using the spectral synthesis property of $(C_b(X, \mathbb{C}), \beta)$ we give a necessary and sufficient condition over X ; in order that $(C_b(X, \mathbb{C}), \beta)$ has no proper closed finite generated ideals, which generalizes the results obtained by H. Arizmendi, A. Carrillo and A. García. On the other side, we prove that if X is a pseudocompact space but not compact, $(f_n)_{n=1}^{\infty}$ is an infinite sequence in $(C_b(X, \mathbb{C}), \beta)$ and F is a linear and multiplicative non-zero functional on it, then there exists a continuous one G on $(C_b(X, \mathbb{C}), \beta)$ such that $F(f_i) = G(f_i)$ for every $i = 1, 2, \dots$

This is a joint work with Alejandra García García.