1027-47-130 **Ramesh Garimella*** (rameshg@uca.edu), Department of Mathematics, University of Central Arkansas, Conway, AR 72035, and **Volodymyr Hrynkiv** (vhrynkiv@wpi.edu), Department of Mathematical Sciences, Worcester Polytechnic Institute, Worcester, MA 01609. *A special compact operator.* Preliminary report.

Let X be a complex Banach space. Suppose A is a bounded operator on X such that the spectrum of A contained in a half plane away from the imaginary axis. Using the operator A,we construct a special compact operator with the spectrum lying on the imaginary axis of the complex plane. As an application, we show that for any bounded linear operator A on X with the spectrum contained in a right half plane away from the imaginary axis, there exists an operator B such that AB + BA is of rank one. Further B can be selected such that I + f(A)B is invertible for every analytic function defined on the spectrum of A. (Received February 23, 2007)