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Vladimir V Varlamov* (varlamov@utpa.edu), Department of Mathematics, University of Texas
- Pan American, 1201 W. University Dr., Edinburg, TX 78541-2999. *Fractional Derivatives for
Products of Airy Transforms.*

For a function defined on the real line the Airy transform is defined as a convolution of the Airy function with this function. Fractional derivatives of the product of two Airy transforms are of interest in the theory of nonlinear evolution equations with quadratic nonlinearities. A new integral representation is found for such derivatives. The formula is especially convenient for calculating semi-integer derivatives of the above products. (Received January 26, 2007)