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Ahmed I. Zayed* (azayed@math.depaul.edu), Department of Mathematical Sciences, DePaul University, 2320 N. Kenmore Ave., Chicago, IL 60614, and **Lucia Dettori**. *Applications of the Directional Wavelet and Ridgelet Transforms in Texture Identification.*

We discuss an application of the wavelet, directional wavelet and ridgelet transforms in medical imaging, in particular, in organ identification. Although the applications are two dimensional, we shall introduce the theory in n -dimensions, with $n \geq 2$. In order to apply the transforms to digital images, discretized versions of the transforms will be discussed first. (Received February 17, 2006)