On the General Solution of Elastic Wave Equations in a Granular Elastic Medium

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The elastic wave equation in a semi-infinite granular medium has been transformed by a combination of Fourier and Laplace transformations. An attempt has been made to obtain the surface displacements due to general force system inthree mutually perpendicular directions directly. The solution for the elastic medium can be derived as a particular case. Applications to the study of earthquake source mechanisms have been discussed.