## Accepted Manuscript

Title: On the wedge dispiration in an inhomogeneous isotropic nonlinear elastic solid

Author: Arash Yavari



PII:	S0093-6413(16)00033-1
DOI:	http://dx.doi.org/doi:10.1016/j.mechrescom.2016.02.008
Reference:	MRC 3045

To appear in:

Received date:	26-11-2015
Revised date:	8-2-2016
Accepted date:	10-2-2016

Please cite this article as: Arash Yavari, On the wedge dispiration in an inhomogeneous isotropic nonlinear elastic solid, <*![CDATA[Mechanics Research Communications]]*> (2016), http://dx.doi.org/10.1016/j.mechrescom.2016.02.008

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## ACCEPTED MANUSCRIPT

This short note presents an exact solution for the stress field of a dispiration in an inhomogeneous, isotropic, incompressible, isotropic elastic solid. To the best knowledge of the author, there are no exact solutions for defects in anisotropic nonlinear elastic solids in the literature.

- Finding stress field for an inhomogeneous arbitrary incompressible isotropic solid
- Unboundedness of energy of a screw dislocation in an inhomogeneous neo-Hookean
- For Hencky solid this energy is finite, which is a new result.

Coole Anna

Download English Version:

## https://daneshyari.com/en/article/5018705

Download Persian Version:

https://daneshyari.com/article/5018705

Daneshyari.com