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(71) Applicants (for all designated States except US):
AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH [SG/SG]; 20 Biopolis Way #07-01, Centros, Singapore 138668 (SG). **NATIONAL UNIVERSITY OF SINGAPORE** [SG/SG]; 10 Kent Ridge Crescent, Singapore 119260 (SG).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WONG, Ee Hua** [SG/SG]; Block 20 Choa Chu Kang Street 64, #23-02,

Singapore 689093 (SG). **SEAH, Kah Woon Simon** [MY/SG]; Block 368 Bukit Batok Street 31, #09-469, Singapore 650368 (SG). **RAJOO, Ranjan** [SG/SG]; Block 759 Choa Chu Kang North 5, #04-157, Singapore 680759 (SG).

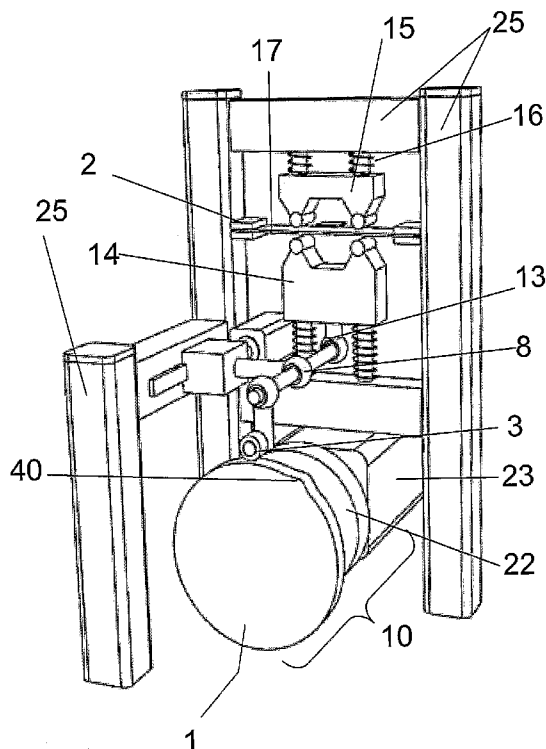
(74) Agent: **SCHIWECK, Wolfram**; Viering, Jentschura & Partner LLP, P.O. Box 1088, Rochor Post Office, Rochor Road, Singapore 911833 (SG).

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(54) Title: BEND TESTING APPARATUS AND METHOD



(57) Abstract: A bend testing apparatus for simulating free vibrational flexing at high speeds and frequencies in a test specimen, said apparatus comprising a cam having a narrow circumferential profile or linear profile wherein at least one portion of the profile of said cam comprises at least one waveform, a specimen holder that holds the test specimen on opposite ends of the test specimen in a default position, a light-weight deformation member operable to deflect at least one point on the test specimen from the default position, a follower with one end in operable contact with the cam and its other end connected to the deformation member, such that a displacement of the follower is according to the profile of the cam, to actuate the deformation member correspondingly and to deflect the at least one point on the test specimen from said default position upon movement of the cam.

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