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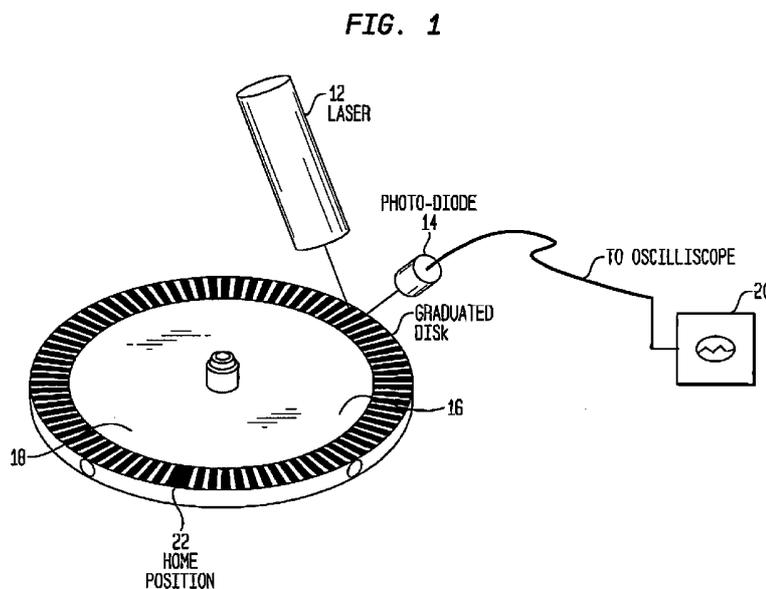
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(54) **Title:** TORQUE MEASUREMENT SYSTEM



(57) **Abstract:** A system and method is provided for determining the torque and kinetic energy of a rotating body without contacting the rotating body. Graduation markings are applied to mark regular angular displacements on the object. Reflected laser light from the graduations is sensed and converted into a pulsed signal. The pulses of the signal are time stamped and used to determine the velocity of the rotating object at angular displacements which can be less than 360 degrees. Changes in angular velocity during each rotation can be measured and used to determine changes in torque and kinetic energy during each rotation.

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A. CLASSIFICATION OF SUBJECT MATTER INV. G01P3/486 G01D5/36		
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B. FIELDS SEARCHED		
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/38885 A (CRANE NUCLEAR INC [US]) 31 May 2001 (2001-05-31) page 1, lines 15-19; figures 1,2 page 10, line 14 - page 11, line 2 page 13, line 11 - page 14, line 14 page 16, line 12 - page 18, line 12 page 20, lines 19-22 -----	1-11
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X	US 5 917 688 A (KIDO NOBUHARU [JP] ET AL) 29 June 1999 (1999-06-29) figures 1-3,8 -----	1-3
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents :		
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Date of the actual completion of the international search <p style="text-align: center; font-weight: bold;">25 August 2009</p>	Date of mailing of the international search report <p style="text-align: center; font-weight: bold;">03/09/2009</p>	
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C(Continuation). . . DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	US 3 698 772 A (NIXON JAMES E) 17 October 1972 (1972-10-17) figure 4 -----	1-3

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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