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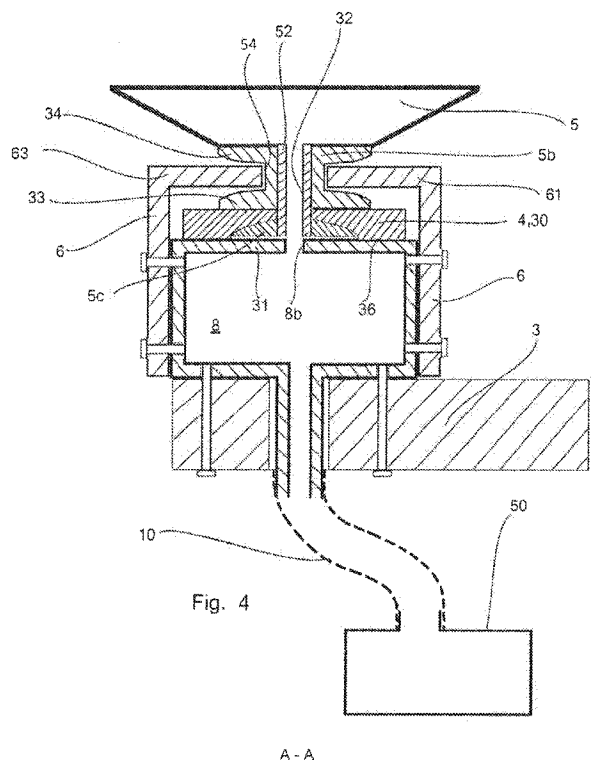
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WO 2015/008101 A1 WO 2000/075000 A1
DE 019727421 A1 KR 100774147 B1
US 4664212 A
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(71) Applicant(s):
Kystvågen Slip & Mek AS
Flatøyveien 24, Frei 6523, Norway, Norway

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(54) Title of the Invention: **Crawler configured for submarine use**
Abstract Title: **Crawler configured for submarine use**

(57) A crawler (100) configured for submarine use, with a bottom side for positioning against a surface (28), including : - at least two wheels (2) and a driving device (19) for driving at least one of the two wheels (2); - a track (4) extending around and between the wheels (2), the track (4) between the wheels (2) extending in an inner portion (29) and an outer portion (30), wherein an outside of the outer portion (30) of the track (4) forms the bottom side of the crawler (100); - a rail (31, 31', 31'') positioned within an inside of the outer portion (30) of the track (4); - suction cups (5, 5', 5'') on the outside of the track (4) for positioning against the surface (28); and - a suction device (50) in fluid communication with the suction cups (5, 5', 5''), so that a negative pressure is produced in the suction cups (5, 5', 5'') when the suction cups (5, 5', 5'') on the outside of the outer portion (30) of the track (4) are placed against the surface (28), and the crawler (100) is thereby held fixed against the surface (28), wherein - each suction cup (5) is provided with a neck (5b, 5b', 5b''); - the neck (5b, 5b', 5b'') is attached to the track (4); - the neck (5b, 5b', 5b'') includes at least one gap 54; - an internal channel (32, 32', 32'') extends through the neck (5b, 5b', 5b'') and the track (4); - a guide (6, 6') fixed in the crawler (100) includes at least one guide rib (61, 63; 65) positioned in the gap (54) when the suction cups (5, 5', 5'') are on the outside of the outer portion (30) of the track (4); and - a fluid connection is formed from a vacuum pipe (10, 10', 10''), a vacuum chamber (8, 8', 8''), 38) and the internal channel (32, 32', 32'') between the suction device (50) and the suction cup (5, 5', 5'').



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(72) Inventor(s):

**Einar Nøstvold
Helge Nøstvold**

(74) Agent and/or Address for Service:

**Kjell Arne Hoff
Håmsø Patentbryå ANS, Postboks 171, Sandnes 4301,
Norway**