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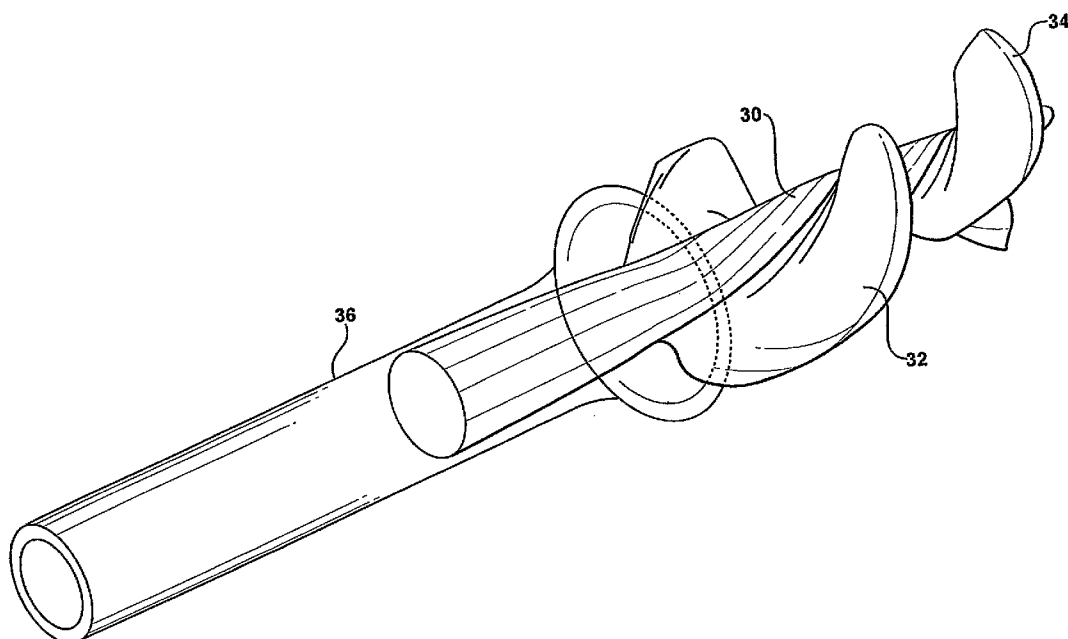
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[Continued on next page]

(54) Title: EXPANDABLE IMPELLER PUMP



(57) Abstract: An impeller according to an example of the present invention comprises a hub, and at least one blade supported by the hub. The impeller has a deployed configuration in which the blade extends away from the hub, and a stored configuration in which the impeller is radially compressed, for example by folding the blade towards the hub. The impeller may comprise a plurality of blades, arranged in blade rows, to facilitate radial compression of the blades. The outer edge of a blade may have a winglet, and the base of the blade may have an associated indentation to facilitate folding of the blade.

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RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA,
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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: F04D 29/38(2007.01),29/18(2007.01)

USPC: 416/87,88,142,189,198R,228,234,236R,241A

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 416/87,88,142,189,198R,228,234,236R,241A

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/0101406 A1 (HOOVER) 27 May 2004 (27.05.2004), Figs. 1-3A.	1, 5, 9, 15, and 16
X	US 3,510,229 A (SMITH) 05 May 1970 (05.05.1970), Figs. 1-4.	17-20, and 25
Y	US 6,517,315 B2 (BELADY) 11 February 2003 (11.02.2003), Figs. 1-3.	8, 26, 27, and 30
Y	US 5,437,541 A (VAINRUB) 01 August 1995 (01.08.1995), Figs. 1-4.	26, 27, and 29
X	US 6,547,519 B2 (deBLANC et al.) 15 April 2003, Figs. 1-6.	1



Further documents are listed in the continuation of Box C.



See patent family annex.

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Continuation of B. FIELDS SEARCHED Item 3:

East search

Search terms: impeller, propeller, blade, hub, deployed, stowed, stored, notch, groove, indentation