

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

To: MBM INTELLECTUAL PROPERTY LAW LLP 275 Slater, 14th Floor OTTAWA, Ontario Canada, K1P 5H9		Date of mailing 16 March 2015 (16-03-2015) <i>(day/month/year)</i> Applicant's or agent's file reference 1388-157PCT FOR FURTHER ACTION See paragraph 2 below	
International application No. PCT/CA2015/050061	International filing date <i>(day/month/year)</i> 29 January 2015 (29-01-2015)	Priority date <i>(day/month/year)</i> 30 January 2014 (30-01-2014)	
International Patent Classification (IPC) or both national classification and IPC IPC: E03F 5/10 (2006.01), F16L 43/00 (2006.01), F16L 55/07 (2006.01)			
Applicant CLEARFORD INDUSTRIES INC.			

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/CA Canadian Intellectual Property Office Place du Portage I, C114 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9 Facsimile No.: 001-819-953-2476	Date of completion of this opinion 12 March 2015 (12-03-2015)	Authorized officer Daniel Cormier (819) 997-2754
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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/CA2015/050061

Box No. I

Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed.
- ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing:

- a. ☐ forming part of the international application as filed:
- ☐ in the form of an Annex C/ST.25 text file.
 - ☐ on paper or in the form of an image file.
- b. ☐ furnished together with the international application under PCT Rule 13*ter*.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.
- c. ☐ furnished subsequent to the international filing date for the purposes of international search only:
- ☐ in the form of an Annex C/ST.25 text file (Rule 13*ter*.1(a)).
 - ☐ on paper or in the form of an image file (Rule 13*ter*.1(b) and Administrative Instructions, Section 713).

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement									
1. Statement	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; vertical-align: top;">Novelty (N)</td> <td style="width: 40%; vertical-align: top;"> Claims 3, 6-14 Claims 1-2, 4-5, 15 </td> <td style="width: 30%; vertical-align: top; text-align: right;"> YES NO </td> </tr> <tr> <td style="vertical-align: top;">Inventive step (IS)</td> <td style="vertical-align: top;"> Claims NONE Claims 1-15 </td> <td style="vertical-align: top; text-align: right;"> YES NO </td> </tr> <tr> <td style="vertical-align: top;">Industrial applicability (IA)</td> <td style="vertical-align: top;"> Claims 1-15 Claims NONE </td> <td style="vertical-align: top; text-align: right;"> YES NO </td> </tr> </table>	Novelty (N)	Claims 3, 6-14 Claims 1-2, 4-5, 15	YES NO	Inventive step (IS)	Claims NONE Claims 1-15	YES NO	Industrial applicability (IA)	Claims 1-15 Claims NONE	YES NO
Novelty (N)	Claims 3, 6-14 Claims 1-2, 4-5, 15	YES NO								
Inventive step (IS)	Claims NONE Claims 1-15	YES NO								
Industrial applicability (IA)	Claims 1-15 Claims NONE	YES NO								
2. Citations and explanations:	D1: US 4886605 (HERVE, P.) 12 December 1989 (12-12-1989) D2: US 3923657 (ROSER, K. F.) 2 December 1975 (02-12-1975) D3: US 2432887 (HAVILAND, L. J.) 16 December 1947 (16-12-1947) D4: US 3709527 (NATIONS, R. L.) 9 January 1973 (09-01-1973) D5 : US 2621157 (D'ALIBERTI, M.) 9 December 1952 (09-12-1952) D6: US 4438861 (MCGUFFEY, J. W.) 27 March 1984 (27-03-1984) Inventive Concept : septic tank inlet pipe construction which permits improved digestion rate inside septic tank. <u>Novelty (N)</u> Claim 1 is not novel and does not comply with PCT Article 33(2) of the Patent Act. D1 teaches an inlet pipe (2) for a septic tank, comprising an inlet (16), in a first plane, for receiving organic-containing liquid from a source, an outlet (18) disposed in a second plane, the outlet fluidly communicating with the inlet by way of a pipe (17), the pipe having an upper surface and a vented orifice (31) located on the upper surface, wherein an angle is disposed between the first and second planes, allowing for flow deflection resulting in increased mixing. Claims 2, 4, 5 and 15 are not novel and do not comply with PCT Article 33(2). In D1, the pipe is curved between the inlet and the outlet and comprises a plurality of curved sections as well as first, second and third straight pipe sections (16, 17, 18), respectively. The organic-containing liquid is sewage. Claims 3 and 6-14 are novel and comply with PCT Article 33(2) because none of the cited art teaches the limitations defined therein. <u>Inventive Step (IS)</u> Claim 1 does not have an inventive step and does not comply with PCT Article 33(3) in view of D1 which teaches all of the limitations defined therein, and, in view of D2 over which the claimed subject matter does not define an inventive step. D2 teaches a hydraulic mixer or an inlet pipe construction for a septic or interceptor tank, which includes a vented orifice via copper pipe (46) through which can be fed air from an air supply (56). However, the vented orifice (46) is not located in the upper surface of a pipe. The choice of location for a vented orifice falls within the scope of knowledge of the skilled artisan and therefore it would have been obvious to modify the hydraulic mixer taught by D1 and specify that the vented orifice is located on an upper surface of the inlet pipe rather than on a lower surface as is the case in D2. Claims 2, 4, 5 and 15, given they do not define novel subject matter are therefore considered to not define an inventive step and therefore fail to comply with PCT Article 33(3). Claims 3 and 6-14 do not define an inventive step and do not comply with PCT Article 33(3). The subject matter of dependent claims 3 and 6-14 relate to minor structural limitations that would fall within the scope of knowledge of the skilled artisan and cannot be considered as being inventive. The provision of a pipe which is smoothly and continuously curved from inlet to outlet (rather than discontinuously or by sections as is the case in D1 for example), or which has a joint between the inlet and the outlet, or has a geometric or decagonal configuration, and so forth, relate to design choices that the skilled technician would be familiar with.									

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V

Industrial Applicability (IA)

Claims 1-15 have an industrial applicability and comply with PCT Article 33(4).