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- (72) **Inventor; and**
- (71) **Applicant : MNUSHKIN, Igor Anatol'evich** [RU/RU];
60/1 prospekt Salavata Yulaeva, Ufa, 450071 (RU).
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(54) **Title:** FRACTIONATION UNIT

(57) **Abstract:** The invention relates to mass-exchange equipment for liquid-gas (vapour) systems and can be used for implementation of rectification, distillation and adsorption separation processes in oil refining, gas processing, chemical, food and other industries. The fractionation unit comprises a housing with inlet connections for feed, reflux, vapours from the boiler or the hot stream from the furnace, with outlet connections for bottom, overhead and side products, systems of temperature, pressure, flowrate and quality measurement, manholes and mass-exchange sections, accommodating contact devices of packed and/or tray cross-flow type with drain partitions, pockets and overflow pipes; multiflow contact devices with different number of flows have a reflux sump on adjacent contact devices; this sump is connected with the overflow pipes of the overlying contact device and is connected by overflow pipes with the reflux distributor on the underlying contact device; at that in case of circulating reflux in the fractionation unit the circulating reflux inlet and outlet connections are linked with the corresponding reflux sumps.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/RU 2015/000521

A. CLASSIFICATION OF SUBJECT MATTER		
BOW 3/32 (2006.01)		
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)		
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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)		
Espacenet, PatSearch (RUPTO internal), RUPTO		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	RU 2148069 CI (OBSHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU "LUKO YL-PERMNEFTEORGSIINTEZ") 27.04.2000, p. 5, right col, lines 1-6, p. 6, right col, lines 6-46, p.7, left col., lines 13-21, right col., lines 1-19, line 64 - p. 8, left col., line 14, drawing	1-14
A	RU 2412228 CI (OBSHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU PROEKTNO-TEKHNOLOGICHESKIY INSTITUT NKHP) 20.02.201 1, p. 5, last paragraph, fig. 1	1-14
A	SU 1803 172 A 1 (MAZHEYKSKIY NEFTEPERERABATYVAYUSCHIY ZAVOD) 23.03. 1993, abstract	1-14
A	RU 104859 U1 (GOSUDARSTVENNOE OBRAZOVATELNOE UCHREZHDIENIE VYSSHEGO PROFESSIONALNOGO OBRAZOVANIYA "TAMBOVSKIY GOSUDARSTVENNYIY TEKHNIЧЕСKIY UNIVERSITET") 27.05.201 1, paragraph 12, drawings	1-14
A	US 5547617 A (GLITSCH, INC.) 20.08.1996	1-14
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