

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO	
RAD: 14-22868- -2	FECHA: 2015-05-19 18:25:20
DEP: 2020 DIRECCION DE NUEVAS CREACIONES	EVE: 1 REGISTRO/DEPOSITO/CONCESION/DEPOSITO
TRA: 2 PATENTES DE INVENCION	FOLIOS: 5
ACT: 430 REQUERSOLICITA	

DIRECCIÓN DE NUEVAS CREACIONES

2020
Bogotá, D.C.,

Abogado(a)/Señor(a)
DORIS ALEXANDRA FIQUE SALAS
DORIS ALEXANDRA FIQUE SALAS

Asunto: Radicación: 14-22868- -2
Trámite: 2
Evento: 1
Actuación: 430
Oficio: 5457
Folios: 5

Patente de Invención	X			Patente de Modelo de Utilidad	
Vía Nacional	X				
Vía PCT (Fase Nacional)		Capítulo I		Capítulo II	
No. Solicitud Internacional					
Fecha de Presentación Internacional					

Como resultado del examen de fondo realizado, con fundamento en el Artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se comunica:

1. Documentos estudiados

Descripción:	Rad. N° 14-022868-00000-0000	04/Febrero/2014
Reivindicaciones:	Rad. N° 14-022868-00000-0000	04/Febrero/2014
Dibujos:	Rad. N° 14-022868-00000-0000	04/Febrero/2014

2. Objeto de la invención

De acuerdo con lo establecido en el numeral 1.2.2.2 del Capítulo Primero del Título X de la Circular Única para efectos del examen de patentabilidad, se tendrá en cuenta la tasa pagada por el solicitante al momento de comenzar el examen para las reivindicaciones adicionales; esto es que cuando la solicitud contenga más de diez (10) reivindicaciones y no se haya pagado la tasa complementaria, sólo se estudiarán las cubiertas por la tasa pagada. Por lo tanto, se estudiaran las reivindicaciones 1 a 9.

Título de la solicitud: “Filtro circular con contenedor líquido cromático translucido (amarillo o naranja o rojo carmesí o combinación de estas) que tiene formas geométricas (poligonales, figuras circulares y de mas” (Fl. 1).

El problema planteado en esta solicitud, consiste en un filtro circular sobre el cual pueda incidir luz convencional y convertirla en luz terapéutica, que puede ser dirigida a diferentes partes del cuerpo del paciente.

Para resolver este problema técnico, la solicitud en estudio propone un filtro circular que comprende: a) una unidad de recubrimiento, b) una unidad de coloración y c) una unidad de estructura geométrica de disposición del tubo.

El objeto de la presente solicitud se relaciona con la Clasificación Internacional de Patentes (CIP): G 02 B 26/00.

3. Reivindicaciones relativas a un uso o a un segundo uso (Art 14 y 21 D 486)

Las reivindicación 2, al mencionar que el filtro circular “...*puede utilizarse en sumatoria serial de filtros para dar un efecto más denso.*”, está refiriéndose a la forma en que puede utilizarse el filtro para el cual se solicita protección. De acuerdo con el art. 14 de la Decisión 484, los usos no son materia patentable. En consecuencia, se sugiere al solicitante eliminar la reivindicación citada.

Debido a que las características de la reivindicación 6 están redactadas de forma general, tal y como será expuesto en el numeral 4 del presente requerimiento, dicha reivindicación se refiere a un producto ya patentado que no puede ser objeto de nueva patente, por el simple hecho de atribuírsele un uso distinto al originalmente comprendido por la patente inicial, de acuerdo con el art. 21 de la Decisión 486. Lo anterior, teniendo en cuenta que el documento D1 puede afectar las características tal y como están descritas en la reivindicación citada, como puede observarse en el examen de patentabilidad.

4. De la solicitud de patente

Reivindicaciones (Art 30 D 486, Art 22 PCT)

El capítulo reivindicatorio no es claro porque:

- Las reivindicaciones 1 a 5 no son claras, toda vez que en su preámbulo se menciona el filtro circular, pero la parte caracterizadora expone las etapas de fabricación del filtro. Cabe aclarar, que las reivindicaciones de producto sólo pueden ser definidas en términos de su proceso de fabricación si no se puede definir por sus características estructurales. En este caso, se puede inferir que la reivindicación 6 es la que corresponde a una reivindicación de producto y que en las reivindicaciones 1 a 5 se quiere reclamar el proceso de fabricación del mismo. En consecuencia, se sugiere al solicitante modificar el preámbulo de las reivindicaciones 1 a 5 de tal manera que sean coherentes con lo que reclaman en su parte caracterizadora, por ejemplo: “Método de fabricación del filtro circular caracterizado por: ...”.

- La expresión: “y demás” (reivindicaciones 5 y 9), es imprecisa, por lo cual no permite distinguir la invención del estado de la técnica. Se sugiere al solicitante eliminar dicha expresión.
- La reivindicación 6 tiene una falsa dependencia respecto a la reivindicación 1, toda vez que la reivindicación 6 es una reivindicación de producto, mientras que se entiende que la reivindicación 1 es una reivindicación de procedimiento. De acuerdo con lo anterior, se sugiere al solicitante eliminar la dependencia de la reivindicación 6, volviendo a dicha reivindicación independiente.
- Las expresiones: “una unidad de recubrimiento”, “una unidad de coloración” y “una unidad de estructura geométrica de disposición de tubo” (reivindicación 6), son de carácter general y sugieren de forma imprecisa que la protección se extiende a otras posibles variaciones o modificaciones, lo que no permite comparar el filtro con el estado de la técnica. Lo anterior, debido a que no se exponen las características estructurales que conforman cada unidad. Es decir, las expresiones citadas no son suficientes para comprender la configuración del filtro. Se sugiere al solicitante especificar las características de cada unidad en la reivindicación 6.
- La solicitud no contiene números de referencia que acompañen las características técnicas del filtro reclamado. Se sugiere al solicitante asignar un número de referencia a cada una de las características de la invención e incluirlo en la descripción, las reivindicaciones y los dibujos. Lo anterior, con el fin de facilitar la identificación de las características del filtro en la solicitud.
- La expresión: “...para dar un efecto mas denso.” (reivindicación 2); describe una función, efecto, ventaja o un resultado a alcanzar, los cuales no son aspectos susceptibles de patente. Para mayor claridad, el producto reclamado se debe definir técnicamente mediante sus características estructurales. Se sugiere al solicitante que al replantear el capítulo reivindicatorio no incluya este tipo de aspectos en las reivindicaciones.

Descripción (Art 28 D 486)

La descripción presenta errores de transcripción al mencionar: “un un filtro circular conformado” (Pág. 10). Se sugiere al solicitante realizar las correcciones correspondientes.

5. Determinación del Estado de la Técnica

El estado de la técnica se determinó con base en la fecha de presentación de la solicitud de patente nacional: febrero 4 de 2014, y se encontró el siguientes documento que anticipan el objeto de esta solicitud:

Ítem	Documento	Título	Fecha de Publicación
D1	US 3'149.941	'Chromatography apparatus'	22/Septiembre/1964

El documento D1¹ divulga una invención relacionada con cromatografía y más específico a mejoras en columnas cromatográficas (Col.1, líneas 9 y 10).

6. Examen de Patentabilidad (Art 14 D486)

El examen de patentabilidad que se muestra a continuación se realizó con base en las objeciones de claridad expuestas en el numeral 4 de la presente comunicación.

Novedad (Art 16 D486)

La reivindicación 6 consiste en: “*Filtro circular con contenedor líquido, según reivindicación 1, caracterizado porque comprende: a) una unidad de recubrimiento...*” (Ver página 16 del radicado N° 14-022868-00000-0000).

Comparación de las características técnicas esenciales, con las del estado de la técnica:

Características esenciales	D1
Filtro circular caracterizado por:	Aparato de cromatografía con un plato circular (34) (Col. 2, líneas caracterizado por:
Una unidad de recubrimiento.	2 platos (Col. 2, línea 30).
Una unidad de coloración.	Tubos empacados en espirales (Col. 2, líneas 60 a 63).
Una unidad de estructura geométrica de disposición de tubo.	

De acuerdo con la tabla anterior, las características esenciales del filtro de la reivindicación 6 habían sido divulgadas previamente en el documento D1, por lo tanto, la materia reivindicada no es nueva.

Cabe aclarar que, debido a que la reivindicación 6 está redactada de forma general, tal como será expuesto en el numeral 4 del presente comunicado, puede ser afectada con cualquier objeto del estado del arte que comprenda las características constructivas tal y como están descritas en dicha reivindicación.

De igual manera, la reivindicación 9 no puede dar novedad a la invención, toda vez que el documento D1 divulga Tubos empacados en espirales (Col. 2, líneas 60 a 63).

7. Conclusión

Los requisitos de Patentabilidad de la presente solicitud están afectados así:

Ítem	Documento	Reivindicaciones afectadas	Requisito que afecta
D1	US 3'149.941	6 y 9	Novedad/Nivel Inventivo

1 <https://www.google.ca/patents/US3149941?dq=3149941&hl=es-419&sa=X&ei=ExofVaObA8b2sAXJuYCIDQ&ved=0CB0Q6AEwAA>

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de sesenta (60) días contados a partir del día siguiente de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente.

Se invita al solicitante se sirva indicar, si así lo considera, su renuncia al término faltante de sesenta (60) días para dar respuesta a este requerimiento y presentarla por escrito.

Finalmente, se le recuerda al solicitante que si como respuesta a este requerimiento llegara a modificar el capítulo reivindicatorio y éste contenga más de diez (10) reivindicaciones, no pagará la tasa de modificación voluntaria pero sí la correspondiente al pago por reivindicación adicional.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única No. 10 de 2001.



JOSÉ LUIS SALAZAR LÓPEZ
Director de Nuevas Creaciones (c)

El anterior requerimiento fue notificado por fijación en lista, de fecha 2015-05-26

Elaboró: Monica Andrea Gutierrez Almonacid
Revisó: Sonia Andrea Diaz Pirazan

Sept. 22, 1964

E. S. BARNITZ ET AL
CHROMATOGRAPHY APPARATUS

3,149,941

Filed Dec. 30, 1957

2 Sheets-Sheet 2

FIG. 4

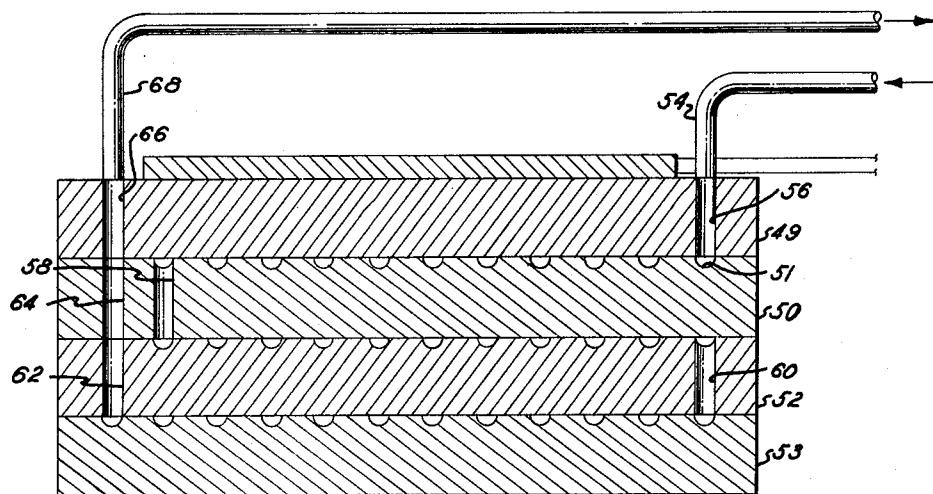
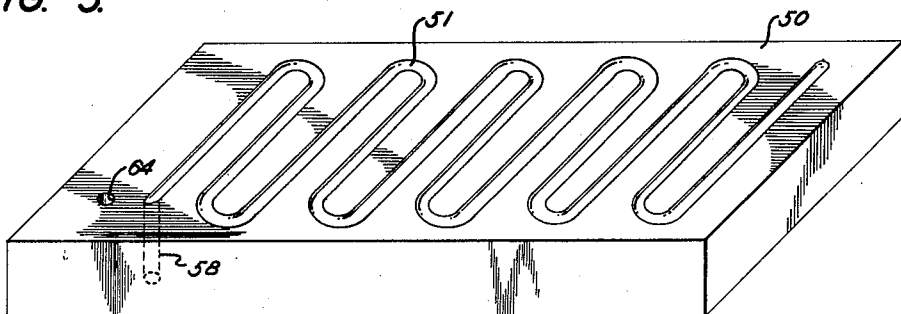


FIG. 5



INVENTOR.
EDWARD S. BARNITZ
MONTE L. MARKS
BY
Christie, Parker & Hale
ATTORNEYS

1

3,149,941

CHROMATOGRAPHY APPARATUS

Edward S. Barnitz, Rochester, N.Y., and Monte L. Marks, Pasadena, Calif., assignors, by mesne assignments, to Consolidated Electrodynamics Corporation, Pasadena, Calif., a corporation of California

Filed Dec. 30, 1957, Ser. No. 705,850

1 Claim. (Cl. 55—386)

This invention relates to chromatography and particularly to improvements in chromatographic columns.

Chromatography is an analytical technique for the resolution of components in a mixture. Separation of components is made by passing the mixture over an adsorbent medium which selectively retards certain components.

Because of its basic simplicity as a means of separating a mixture into its components, chromatography has rapidly become an analytical tool of wide and important uses.

Typical apparatus for the chromatographic analysis of fluids includes a long, small diameter column packed with adsorbent material such as silica-gel. The sample to be analyzed, say a gas mixture of various components, is mixed with a carrier gas and passed through the column. The column separates the sample into its constituent components.

On leaving the column, each component is carried through a device for measuring a certain characteristic of the component, such as thermal conductivity, which indicates what the component is.

The accuracy of chromatographic analysis is particularly sensitive to the uniformity of the adsorbent packing in the column and controlled temperature throughout the path of the gas stream.

In the chromatograph columns heretofore made from long tubes, uniform packing of the adsorbent is obtained by filling the tube from one end. The procedure is both difficult and expensive. If the packing proves unsatisfactory upon testing, the column is salvaged only by completely emptying it and refilling it with packing material.

In addition, to maintain a uniform temperature in the column, it is necessary to bend the filled column into a more compact form, such as a helical coil, which can be immersed in a constant temperature bath or oven. Such bending tends to cause pores or cavities in the packing material, and causes the packing to be of non-uniform density.

This invention provides a chromatographic column which is easily packed uniformly with adsorbent throughout its length, and the column is compact so that its temperature is readily controlled, thereby making it convenient and practical to use for commercial chromatographic analyses. In addition, the column is easily tapered to a reduced cross section near the outlet end to gain additional improvement in performance.

Briefly, the invention contemplates an improved column for chromatographic analyses in which a gas stream is passed through an adsorbent packing to bring about at least partial separation of a component thereof so the concentration of the component is decreased at one point in the stream and increased at another point. The column includes two plates disposed side by side with a tortuous channel in at least one of the plates at the interface between them. The adsorbent packing is disposed in the channel, and means are provided for holding the plates together.

These and other aspects of my invention will be more fully understood from the following detailed description taken in conjunction with the accompanying drawing in which:

FIG. 1 is a schematic flow diagram showing the use of the chromatograph column of this invention;

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FIG. 2 is a sectional elevation of the chromatographic column shown in FIG. 1;

FIG. 3 is a view taken on line 3—3 of FIG. 2;

FIG. 4 is an alternate embodiment of the invention; and
FIG. 5 is a perspective view showing one of the plates of FIG. 4.

Referring to FIG. 1, a carrier gas such as helium is carried by a line 10 from a source 11 through a control valve 12 and flow meter 13 into a helium preheater 14. The carrier gas then passes through a first pair of four thermal conductivity cells connected together in a conventional manner in an analyzer 16 as two arms of a Wheatstone bridge. The carrier gas then flows through a four way sample dosing valve 18 and to an inlet line 20 into a chromatographic column 22. After passing through the interior of the chromatographic column, the carrier gas then flows from the column out an outlet line 23 back to the analyzer where it passes over a second pair of thermal conductivity cells connected to form the other two arms of the Wheatstone bridge. The carrier gas then exhausts to atmosphere from the analyzer. The Wheatstone bridge in the analyzer includes a pair of input terminals 24 and a pair of signal output terminals 26.

Referring to FIG. 2, the chromatographic column includes a first or lower circular plate 28 which has a smooth top surface.

A second or upper circular plate 34 of the same diameter as the lower plate has a spiral groove or channel 35 in its lower surface, which rests on a flat gasket 36 sandwiched between the two plates. The groove begins in a recess 37 formed in the center of the bottom surface of the top plate and terminates near the periphery of the plate (see FIG. 3). An upwardly projecting inlet fitting 38 is bonded to the center of the top surface of the upper plate and is connected by a vertical bore 39 with the central recess in the grooved surface of the top plate. An upwardly projecting outlet fitting 42 is bonded to the periphery of the top surface of the upper plate and is connected by a vertical bore 43 to the outer end of the spiraled groove. An annular gasket 44 is disposed in an annular groove 45 in the periphery of the lower surface of the upper plate to effect a seal between the periphery of the upper plate and the flat gasket. The two plates are held in compression against the flat gasket by a plurality of bolts 46 located in matching bores 48 around the peripheries of the upper and lower plates. As shown in FIGS. 2 and 3, the outer end of the groove is tapered to reduced width and depth to give the outlet end of the column a gradually decreasing cross section in the direction of fluid flow.

The chromatographic column shown in FIGS. 1 through 3 can easily and inexpensively be machined or cast and assembled. Prior to assembly, the adsorbent packing, which may be suitably coated with adsorbent, is uniformly tamped into the spiral groove of the upper plate, the upper plate being inverted from the position shown in FIG. 2 during the tamping operation. In this way, it is easy to ascertain by visual inspection the proper packing of the chromatographic column. Moreover, there is no problem presented of possible cavitation of the adsorbent such as sometimes occurs when packed tubes are bent in the form of tight spirals.

The flat gasket, which preferably is of a material inert at the operating temperatures of the chromatographic column, is then disposed over the packed groove, the annular gasket having already been placed in the position shown in FIG. 2. The second plate is then clamped against the first plate as shown in FIG. 2 to sandwich the gaskets and adsorbent material between the two plates, and the assembled column is turned over and connected to the inlet and outlet lines as shown in FIG. 1.

The plates may be made of any suitable material, but

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preferably they are made of a metal of high heat conductivity, such as brass. Also, the abutting surfaces of the plates are highly polished to effect a good seal.

An important advantage of the chromatographic column just described is that should the packing prove to be unfit upon testing, or after extensive use, the column is readily salvaged by opening it up, and inspecting the packed adsorbent for signs of channeling or cavitation. The advantage of this procedure over having to unpack and repack completely a spiral tube is readily apparent.

In the operation of the apparatus of FIG. 1, suitable heating means (not shown), which may be conventional, maintain the thermal conductivity cells of the analyzer and the chromatographic column at the desired temperature. When an analysis is to be made, the four-way sample valve is rotated 90° so that a small, accurate volume of sample is introduced in the stream of carrier gas. The sample and carrier pass through the chromatographic column, where the various components of the sample are separated according to their respective retention times. The emergence of each component of the sample from the chromatographic column is detected and measured by the analyzer.

FIG. 4 is a schematic view of an alternate embodiment of the invention in which a plurality of plates are sandwiched together to provide a long chromatographic column which is easily maintained at a uniform temperature. A top plate 49 rests on the upper surface of a first intermediate plate 50 which has a serpentine groove 51 in its upper surface as shown most clearly in FIG. 5. The first intermediate plate rests on a second intermediate plate 52 which is similarly grooved in its upper surface. The second intermediate plate rests on the top of a bottom plate 53 similarly grooved in its upper surface. The matching surfaces are highly polished and coated with a suitable sealant, such as a high temperature, low volatility, and inert silicone grease. Each groove is packed with a suitable adsorbent.

Carrier gas and sample flows from an inlet line 54 down

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a vertical bore 56 in the top plate and into one end of the groove in the first intermediate plate. A vertical bore 58 in the first intermediate plate connects the opposite end of the groove to an end of the groove in the second intermediate plate. A vertical bore 60 in the second intermediate plate connects the opposite end of the groove to one end of the groove in the bottom grooved plate. The other end of the groove in the bottom plate is connected by collinear bores 62, 64 and 66 in the second intermediate plate, the first intermediate plate, and the top cover plate, respectively, to an outlet line 68. The plates of the chromatographic column shown in FIG. 4 are clamped and sealed together by suitable means such as those shown for the chromatographic column of FIG. 2. The operation of the column of FIG. 4 is the same as that of FIG. 1.

We claim:

An apparatus for treating gas mixtures by gas chromatography which includes two parallel matching plates disposed face to face, one of said plates having a tortuous channel on the face thereof facing the other plate, said tortuous channel containing a sorbent which is effective for chromatographically treating gas mixtures, an inlet port at one end of said channel, an outlet port at the other end of said channel, and means for securing said plates in fluid-tight relationship to prevent gas from flowing outside of said channel as it flows through said channel from said inlet port to said outlet port.

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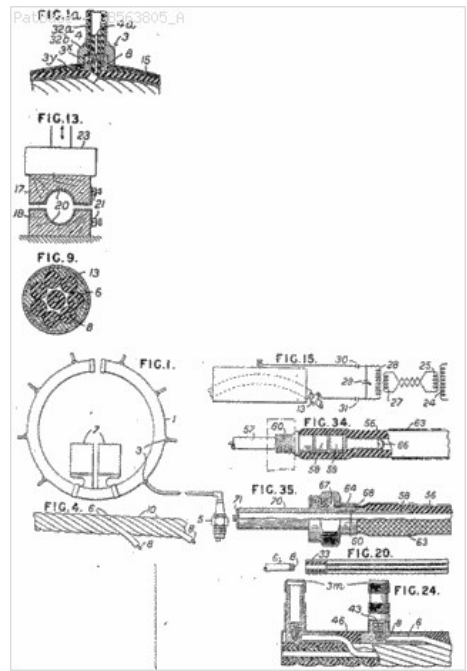
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Search 5: (4) AND PD>1994 (Results 61)
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Search 35: FT=(spiral and flexible and tube) (Results 42453)

Title: 7202. [Class 36] An ignition harness, which is especially applicable in connection with carrying currents from magnetos 7 to....

Abstract: Source: GB563805A 563,805. Electric conductors. WILKOFF, H. M. May 6, 1943, No. 7202. [Class 36] An ignition harness, which is especially applicable in connection with carrying currents from magnetos 7 to sparking- plugs 5 on radial engines used on airplanes, comprises an annular member 1 in which are arranged a number of cables 6 connected respectively to junction members 3 fitted with similar cables leading to the plugs 5. The cables are individually insulated and disposed within a jacket which is tough, elastic, **flexible** and seamless, and is formed of water- and oil-resisting insulating material, enclosed in a **flexible** sheath of electrical conducting material housing the conductor assembly. One method of forming the harness is to take a number of cables 6 of different lengths containing conductors 8 and wrap these in helical form as in Fig. 4. To form a uniform annular member 1 the short cables may be supplemented by similar sized **tubes** of neoprene or the like to make a complete ring 1. The cables 6 are covered with asbestos yarn or shaped strands of plastic material so as to fill the helical grooves 10, Fig. 4, and a thin metal ribbon is then wrapped round the assembled layers. The metal known under the Registered Trade Mark " Duralumin " may be used. Or the assembly could be drawn into a tubular metallic casing, and a cross-section of the assembly is shown in Fig. 9, 13 representing the metal casing. The casing 13 is now wound with two tapes of thermoplastic material such as vinyl chloride, or a vinyl acetate resin in overlapping helices of opposite thread, and these tapes are united by pressure under heat in such manner that the cables are not heated. As shown in Figs. 13 and 15, the assembly between the ends of two conductors is inserted in a wooden mould 17, 18 having a metal lining 20 which is connected by terminals 21 to form one condenser plate of a high frequency tuned circuit, and the casing 13 is connected to form the other plate of the circuit, which comprises a primary - coil 24, secondary coil 25, and primary coil 27 of a secondary coil 28 in the circuit of the condenser plates 20, 13 and also in a circuit containing a variable condenser 29 and auxiliary condensers 30, 31. The current is supplied for 45 seconds while the moulds 17, 18 are acted upon by a press 23. The tapes coalesce to form a tubular jacket which is waterproof, oil resistant, highly elastic, tough and unaffected by temperature conditions. The leads 4 for connecting the cables 6 to the spark plugs are treated similarly to cables 6 and are connected to the cables 6 by means of fittings 3, Fig. 1a, comprising a screw-threaded portion 3 engaging an internally screw-threaded connection 32b of the ignition wire conduit. A flange 3y on the member 3 is bound to the jacket 15 by a plurality of wrappings of thermoplastic tape, and this is consolidated in a mould and heated in a similar manner to the jacket 15. The fitting 3 is provided with a resilient contact for joining the wires 4a and 8. The cable and ignition wires are finally bound in a braided metallic **tube** 32 or 32a, Fig. 1a, which is preferably applied so as to exert a radial stress upon the enclosed assembly. In a modification, Fig. 20, the cables 6 are wound upon a core **tube** 33 of **flexible** material, e.g. of a synthetic resin such as neoprene. This core has a grooved external surface, and is formed with a bore of less diameter than the cables 6 and one cable is passed through the bore while it is inflated. The other cables are laid in the grooves and the core is twisted so as to cause the cables to be in helical form. The core is deflated and the assembly is then mounted in a jig provided with a clamp for each end of the cable. The jig is also provided with means for supporting and holding terminal fittings 3m, Fig. 24, which receive the ends of the individual conductor wires 4, the wires 8 of the cables 6 being connected to spring contacts 43 in the fittings 3m. Neoprene saddle-shaped bridges 46 and **tubes** are used to complete the harness and then a winding of copper foil ribbon is applied after protective layers of neoprene are applied near the cable ends. The copper foil is soldered in place and is applied four layers in thickness. A jacket of neoprene or Vinylite (Registered Trade Mark) is then applied, and the jacket is moulded in a jig and heated by a high frequency current as in the first modification. The sparking-plug leads are constructed with terminal connections 58, Figs. 34, 35, formed with a knurled part 59 and a screw-connection 60 for receiving a fitting 67 which operates clamping rings 64 for compressing a gasket ring 68 which clamps the connection 58 to a **tube** 56 of neoprene or Vinylite covered with armour material 63. The connection 58 is inserted into the **tube** 56 which is of smaller internal diameter by inflating the **tube**. The conductor 57 is also inserted while the **tube** is inflated, a thimble 66 being placed ahead of the conductor as it is being inserted. The conductor passes through a ceramic sleeve 70 and is connected to a terminal 71. At the opposite end of the ignition lead the wire is pushed through the spark-plug elbow, and a lead gasket and clamping rings are applied to this end also.

Classifications:



Family:

Publication number	Publication date	Application number	Application date
GB563805 A	00000000		00000000

Title: Suction cleaner structure

Abstract: Source: GB873294A 873,294. Suction cleaners. ELECTROLUX Ltd. March 26, 1959 [April, 1, 1958], No. 10575/59. Class 8(1). The outlet of a cylindrical type suction cleaner being a rotor fan unit is provided with means whereby the air is discharged in an upward direction. The rear end cover 12, Fig. 3, has an air outlet 21 and a tube 26 extending into the casing whose axis is substantially horizontal when the cleaner is in use. Two vanes 42, 43 are axially spaced along the tube and are of crescent shape when viewed along the axis of the tube as shown in Fig. 5, the ends 44 and 46 extending to just below and above, respectively, the tube axis. The faces of the vanes nearest the front of the cleaner are convex and are at an angle of approximately 45 degrees to the tube axis. The outlet of the tube is shaped to receive a flexible tube when the cleaner is used as a blower and this may be attached to a spraying device. The end cover also houses a cable reel 36.

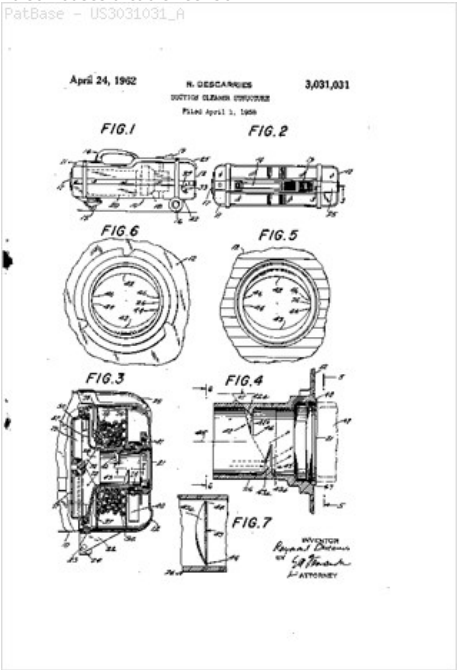
Classifications:

International (IPC 8-9): A47L9/22 D06B5/16 (Advanced/Invention); A47L9/22 D06B5/00 (Core/Invention)

International (IPC 1-7): A47L9/00 A47L9/26 D06B3/14

European: A47L5/36A A47L9/00D A47L9/22 A47L9/26 D06B5/16

US: 15/323 15/327.7 55/413



Family:

Publication number	Publication date	Application number	Application date
CH369264 A	19630515	CH19590071325	19590326
CH369264 A4	00000000		00000000
DE1225352 B	19660922	DE1959A031709	19590328
DE1245060 B	19670720	DE1959A031672	19590325
DE1403120 A1	19690717	DE19591403120	19590318
DE1403120 B2	19700813	DE19591403120	19590318
FR1219611 A	19600518	FR19590790949	19590401
FR1219614 A	19600518	FR19590790952	19590401
FR1219615 A	19600518		00000000
GB873294 A	19610719	GB19590010575	19590326
GB883686 A	19611206	GB19590010572	19590326
GB910287 A	19621114	GB19590010574	19590326
NL103674 C	00000000		00000000
NL237676 A	00000000		00000000
US3031031 A	19620424	US19580725733	19580401

Priority:

CA19580748681 19580401 CA19580748682 19580401 US19580725733 19580401

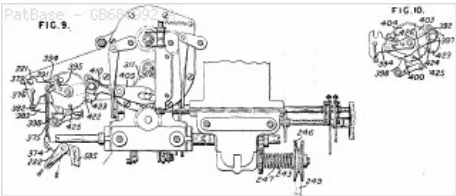
Assignee(s): (std): ELECTROLUX LTD ; ELECTROLUX AB

Assignee(s): AKTIEBOLAGET ELECTROLUX STOCKHOLM ; AKTIEBOLAGET ELECTROLUX ; ELECTROLUX LIMITED

Inventor(s): (std): DESCARRIES RAYMOND ; RAYMOND DESCARRIES ; GAUDRY EDOUARD

Abstract: Source: GB680992A 680,992. Actuation of switches. NATIONAL CASH REGISTER CO. June 22, 1948 [Dec. 6, 1947], No. 16705/48. Class 38 (v) [Also in Groups XVI, XIX and XXIV] The driving motor of a combined calculating and typewriting machine is switched on by a finger lever and is switched off after a given "running period", i.e. after a certain number of revolutions if the calculating or typewriting mechanisms are not operated. The counting of the number of revolutions is started anew each time the calculating or typing mechanisms are operated. When the finger lever 222, Fig. 9, is turned to the "on" position a rod 375 is pulled down to rock clockwise an operating lever 376 to rock a toggle member 379 which operates the switch 221. The operating lever is held in both positions by a roller 382 on a spring-urged arm 383. The motor controlled by the switch drives a gear 311 which oscillates a lever 405 carrying a pawl 410 having a long tooth 422 and a short tooth 423. The long tooth 422 drives at each oscillation the lower 403 of a pair of ratchet wheels 403, 404, Fig. 10. Once in each rotation of the lower wheel 403 the long tooth 422 falls into a deep notch 424 in the lower wheel and enables the shorter tooth 423 to engage and drive the upper ratchet wheel 404 one step. The switchoperating lever, by a pin-and-slot connection 391, rocks counterclockwise an arm 392 to which is pivoted a pawl 394 urged clockwise by a spring 395, the upper part 426 of the pawl then coming into the path of a pin 425 on the upper ratchet wheel 404. The pawl 394 is thus rocked counterclockwise by the pin 425 and is retained by a latch 398 urged by a spring 400. As the upper ratchet wheel 404 continues to rotate, the pin 425 meets the now-raised end 397 of the pawl 394 and rocks the arm 392 and lever 376 to open the switch. In order to start the running period anew each time the calculating or typing mechanism is operated, the latch 398 is tripped at each such operation, by means not shown in Fig. 9, to release the pawl 394 should this be in its counterclockwiserocked position. Specifications 448,791 and 509,042, [both in Group XIX], are referred to.

Classifications:



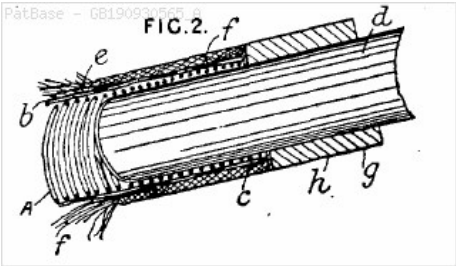
Family:

Publication number	Publication date	Application number	Application date
GB680992 A	00000000		00000000

Title: An Improved Flexible Tube for use with Vacuum Cleaning Apparatus.

Abstract: Source: GB190930565A 30,565. Griffiths, W. Dec. 31. Flexible pipes for vacuum cleaners are made with an inner metal spiral A covered with a double wrapping of American cloth or the like b having a single longitudinal joint and secured by an adhesive which retains its flexibility and is air-proof. A suitable adhesive contains one part by weight of pitch, one part linseed oil, one part soft soap, and six parts of ordinary glue. Over the cloth a braided covering f is placed. The terminal pieces d are secured by soldering to the inner coil A and by binding c, and to reinforce the weakest part of the cloth a shaped piece of linen e is wound on so as to graduate the strain. A ferrule g is placed over the end, and the space between the pipe d and the ferrule is filled with white metal h.

Classifications:
International (IPC 8-9): A47L9/24 (Advanced/Invention);
A47L9/24 (Core/Invention)
CPC: A47L9/24
European: A47L9/24



Family:

Publication number	Publication date	Application number	Application date
GB190930565 A	19110102		00000000

Priority:

19091231

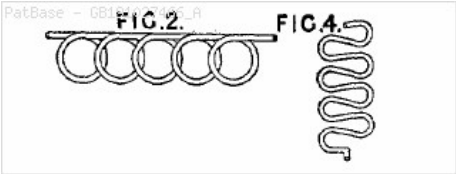
Assignee(s): (std): GRIFFITHS WALTER
Assignee(s): WALTER GRIFFITHS
Inventor(s): (std): GRIFFITHS WALTER
Inventor(s): WALTER GRIFFITHS

Title: Improvements relating to Portable Breathing Apparatus.

Abstract: Source: GB191027466A 27,466. Droger, A. B., and Drogerwerk, H. and B. Droger. Jan. 17. **Flexible** metal **tubes**.-The metal **tube** connecting the pressure gauge to the oxygen cylinder of an apparatus for breathing in impure air, is rendered **flexible** by coiling into a substantially flat **spiral**, Fig. 2, or bending into a zigzag or like shape, Fig. 4. The **tube** is preferably covered by an india-rubber, canvas, or like hose.

Classifications:

International (IPC 8-9): A62B9/00 (Advanced/Invention);
A62B9/00 (Core/Invention)
CPC: A62B9/006
European: A62B9/00C



Family:

Publication number	Publication date	Application number	Application date
GB191027466 A	19110117		00000000

Priority:

19100117

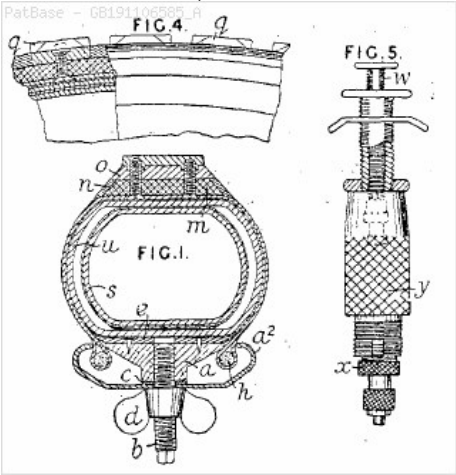
Assignee(s): (std): ALEXANDER BERNHARD DRAEGER ; DRAEGER WERK HEINR AND BERNH DRA

Assignee(s): DRAEGER WERK HEINR AND BERNH DRAEGER

Title: Improvements in or relating to Pneumatic Tyres for Motor and other Vehicles.

Abstract: Source: GB191106585A 6585. Dunn, T. March 16. A tyre fitted to a standard rim a<2>, Fig. 1, consists of a cover with round beads h, a **flexible** metal tread m shod with renewable hard-wearing bodies q, Fig. 4, two inner **tubes** s, u, and a special sectional attaching-ring a. Tyre attachments to rims.-The sections a of wood, aluminium, or hard rubber, are sharply undercut at their sides, faced with a laterallyextending strip of rubber e, and secured by radial bolts b which automatically raise or lower the section. In the form shown, a collar c is fixed to the bolt, and a butterfly nut d is used to hold the sections to the rim. In a modification, the bolt screws in the rim or felloe, and is merely seated in the section. Jackets and covers.-The cover consists entirely of transverse threads protected on each side with thin **skins** of elastic textile material, and finished on the outside with rubber.. In making the cover, rubber-coated thread is wound in a close **spiral** on a drum and coated with rubber solution, a band of textile material is applied, and the material is then cut, stripped from the drum, folded over beading- material such as sash cord, and finally finished with the remaining layer of textile material and rubber. Tread bands, projections, and surfaces.-The tread band consists of a metal ring m of dovetail section, wound with rubber-coated thread and finished on the edges with strips n of rubber. Blocks o of aluminium, lignum vitae, or other light material are fixed to the band and shod with renewable metal.plates q. Air-**tubes**. - An encased air-**tube** s is placed within the outer **tube** u. The inner and outer peripheral contacting surfaces are flat, and the inner **tube** is inflated to a slightly higher pressure than the outer. A double valve is used, consisting of a "voiturette" valve w, Fig. 5, passed through the bored -out stem of an ordinary tyre valve x, and a detachable addition y fitting on the outer end of the tyre valve, in the outer end of which the detachable parts of a standard valve fit.

Classifications:
International (IPC 8-9): B60C19/00 (Advanced/Invention);
B60C19/00 (Core/Invention)
CPC: B60C19/00
European: B60C19/00



Family:

Publication number	Publication date	Application number	Application date
GB191106585 A	19120516		00000000

Priority:
19110316
Assignee(s): (std): DUNN THOMAS
Assignee(s): THOMAS DUNN
Inventor(s): (std): DUNN THOMAS
Inventor(s): THOMAS DUNN

Title: Improvements in and connected with Devices for Catching Flies and the like.

Abstract: Source: GB191120243A 20,243. Mason, H. Sept. 12. Adhesive traps.-In a fly-catcher of the adhesive-band type, the band consists of an elastic or springy material such as celluloid, xylonite, and c., and may be formed as a **spiral**, Fig. 1, or in the forms shown in Figs. 4 and 5. The receptacle e in which the band a is enclosed is suspended by cords g so that the end of the band is approximately over the centre of the receptacle, which is provided with flanges e<1> to receive the cap f to which the other end of the band is secured. The cap is sealed by a cover or label secured to the flanges e<1> and passing over the cap. The band may also be made of paper of an elastic or springy nature, or from paper pulp spread out to dry on a **spiral** base. To produce the **spiral** form, a **tube** of material is mounted on a spindle z in a lathe and is secured against the chuck by a nut y. To prevent the **tube** from sagging and to form a support for the cutter, a sleeve x moves along the **tube** b with the cutter.

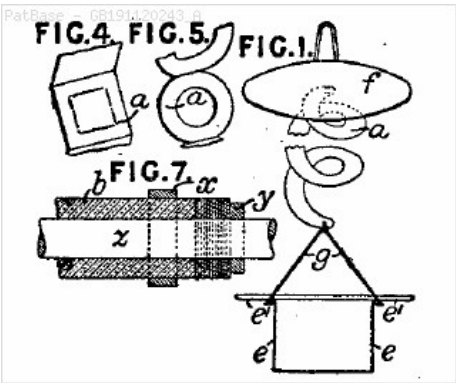
Classifications:

International (IPC 8-9): A01M1/16 (Advanced/Invention);

A01M1/00 (Core/Invention)

CPC: A01M1/16 A01M2200/012

European: A01M1/16 K01M200/012 K01M201/02



Family:

Publication number	Publication date	Application number	Application date
GB191120243 A	19120718		00000000

Priority:

19110912

Assignee(s): (std): MASON HENRY

Assignee(s): HENRY MASON

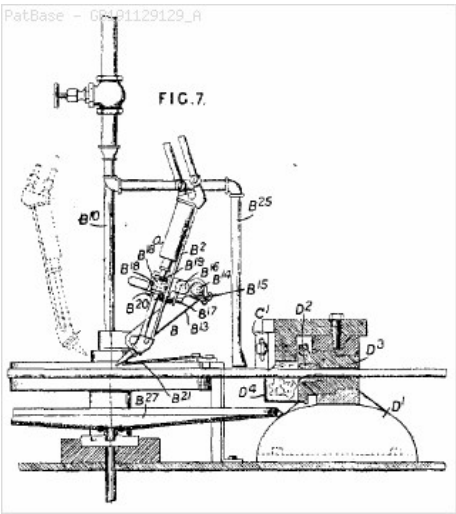
Inventor(s): (std): MASON HENRY

Inventor(s): HENRY MASON

Title: Improvements in the Manufacture of Metal Tubing.

Abstract: Source: GB191129129A 29,129. Mackenzie, J. W., [Automatic Welding Co Dec. 27. Burners, attaching, mounting, and adjusting. -A blowpipe for soldering or welding **tubes** is carried by a split sleeve B<19>, Fig. 7, rotatable in a block B<18>, which is pivoted on a stud B<18a> and adjusted by a spring-resisted thumb-screw B<20>. In order that the blowpipe may be moved out of position and then returned to set position, the stud B<18a> is carried by a lever B<16> pivoted on an arm B<15> fixed to a cross-rod B<14>, the lever carrying a stop engaging a stop B<17> on the arm B<15>.

Classifications:
International (IPC 8-9): B21C37/08 (Advanced/Invention);
B21C37/08 (Core/Invention)
CPC: B21C37/08
European: B21C37/08



Family:

Publication number	Publication date	Application number	Application date
GB191129129 A	19130127		00000000

Priority:

19111227

Assignee(s): (std): MACKENZIE JOHN WILLIAM

Assignee(s): JOHN WILLIAM MACKENZIE

Inventor(s): (std): MACKENZIE JOHN WILLIAM

Inventor(s): JOHN WILLIAM MACKENZIE

Title: Improvements in Tools for Scaling Condenser **Tubes** and other **Tubes**.

Abstract: Source: GB191214294A 14,294. Gilman, F., and Clements, G. F. June 19. [Cognate Application, 15,202/12.] Cleaning internally, rotary appliances for.-A **tube**-cleaning device which may be rotated by hand or power has a drill nose 4 and a tapered part with serrated edges 5, the serrations forming part of a screw-thread. The tapered part merges into a twisted part, which by its form helps to remove debris, and the edges of which give a scraping action. The shank 7 is also of square or other angular cross-section, to serve as a finishing scraper. Removal of debris may be facilitated by fluid pressure, such as a stream of air or water, which may be conveyed to the neighbourhood of the nose of the tool through a copper **tube** housed in a groove running along the device. The tool may also be used by rotating the **tube** in a lathe, and holding the tool against rotation. According to Provisional Specification 14,294/12, the serrations 5 may be annular, instead of screw-form, and the shank of the tool may be tubular to convey the fluid for removing debris.

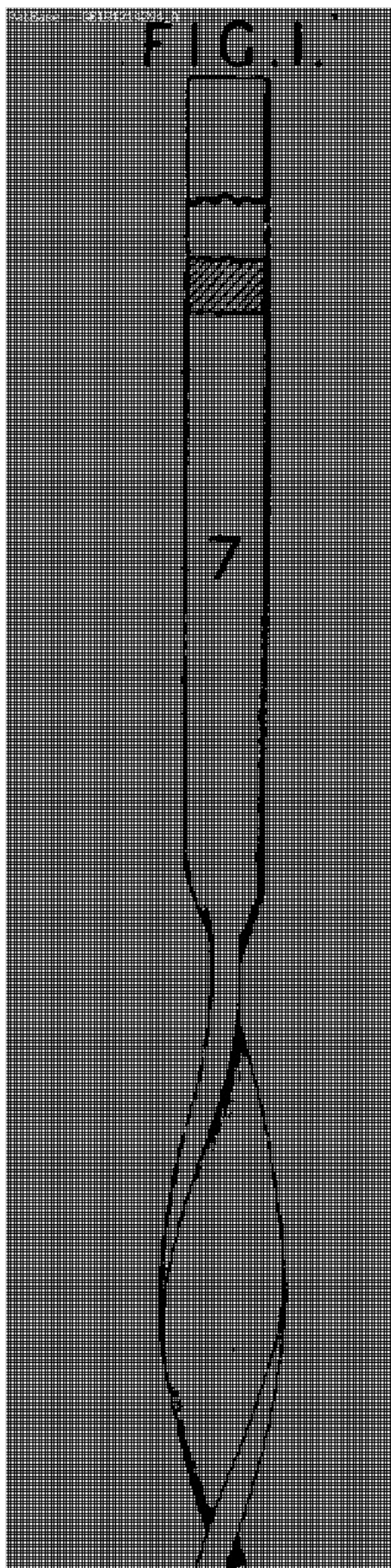
Classifications:

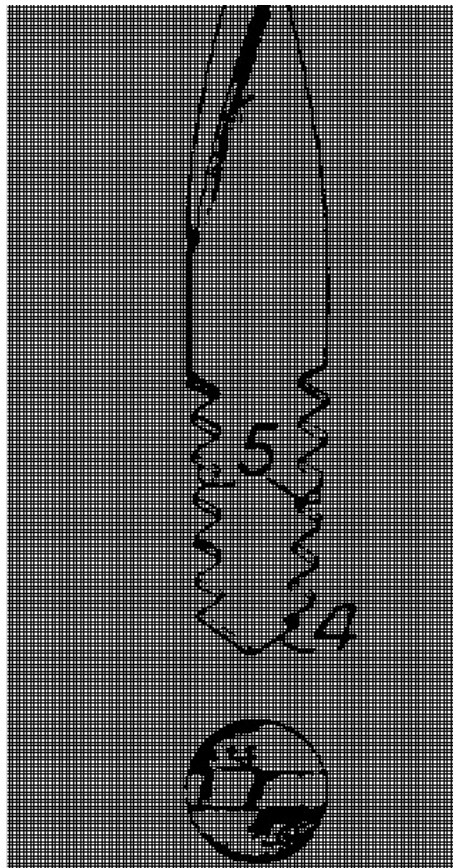
International (IPC 8-9): B08B9/04 (Advanced/Invention);

B08B9/02 (Core/Invention)

CPC: B08B9/0436

European: B08B9/043M





Family:

Publication number	Publication date	Application number	Application date
GB191214294 A	19130508		00000000

Priority:

19120619

Assignee(s): (std): CLEMENTS GEORGE FREDERICK ; GILMAN FRANK

Assignee(s): FRANK GILMAN ; GEORGE FREDERICK CLEMENTS

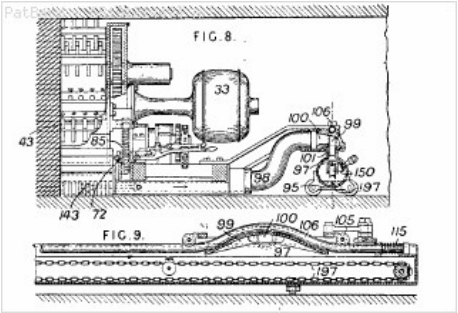
Inventor(s): (std): CLEMENTS GEORGE FREDERICK ; GILMAN FRANK

Inventor(s): FRANK GILMAN ; GEORGE FREDERICK CLEMENTS

Title: Improvements in Methods of Mining Coal, Converting it into Gas, and then Conveying the Gas from the Mine.

Abstract: Source: GB191214494A 14,494. Hoadley, J. H. June 20. Conveying from working face in mines.-Coal is mined and converted into gas, and the gas then conveyed from the mine, by comminuting the coal in the act of removing it from the seam, and transferring the comminuted coal by a fluid conveyer such as air and water and to a gas-producer. The air, water, and pulverized coal pass from a collecting box through a pipe 98 carried by the machine to a suction pipe 95 laid on the floor parallel to the working face. The pipe 95 has a slot 97, Fig. 8, with flared flanges 101 and normally closed by a flexible pipe 106. To provide a communication between the pipes 95, 98, the machine carries a plough 99, Fig. 9, engaging the flanges 101 and raising the part of the pipe 106 adjacent to the orifice 100 of the pipe 98. Rollers 105 press the tube into place on either side of the opening, and a spring 115 at the end of the pipe 106 takes up slack. Water spray nozzles 150 are provided along the pipe 95, and an endless chain 197 assists in moving the comminuted material, which is in the form of an emulsion, until it reaches a collecting chamber.

Classifications:
CPC: E21B43/295
European: E21B43/295



Family:

Publication number	Publication date	Application number	Application date
GB191214494 A	19130522		00000000

Assignee(s): (std): HOADLEY JOSEPH HINSON
Assignee(s): JOSEPH HINSON HOADLEY
Inventor(s): (std): HOADLEY JOSEPH HINSON
Inventor(s): JOSEPH HINSON HOADLEY