

UNITED STATES PATENT OFFICE.

MAX BRESLAUER, OF CHARLOTTENBURG, GERMANY, ASSIGNOR TO THE FIRM OF MINI-MAX CONSOLIDATED LIMITED, OF LONDON, ENGLAND, AND NEURUPPIN, GERMANY.

PROCESS OF EXTINGUISHING FIRES.

990,521.

Specification of Letters Patent.

Patented Apr. 25, 1911.

No Drawing.

Application filed July 26, 1907. Serial No. 385,665.

To all whom it may concern:

Be it known that I, MAX BRESLAUER, a doctor of philosophy and a subject of the German Emperor, a resident of 29 Kleist-strasse, in the city of Charlottenburg, near Berlin, Kingdom of Prussia, and German Empire, have invented a certain new and useful Process for Extinguishing Fires, of which the following is a specification.

10 This invention has reference to means for extinguishing fires, and conflagrations, caused by burning easily volatile, and easily inflammable hydrocarbons, such as benzin, petroleum, kerosene oil, oil of turpentine, and the like, as well as by mineral and vegetable oils, animal fats and the like, and it is intended to avoid the difficulties, heretofore experienced in the attempts to quench such fires by trying to cover them with heaps of sand, earth or the like, or by treating the seat of the fire with non-inflammable gases of high specific gravity, such as carbonic acid, sulfur di-oxid or the like, which gases had to be delivered from containers wherein they were kept under high pressure, and which had to be placed at a great distance from the seat of the fire, in order to avoid bursting and exploding of the said container by the expansion, due to the influence of heat.

30 According to my invention, I make use of a solution of any of the halogens in a suitable solvent, such as chloroform, tetra-chlorid of carbon (CCl_4), or carbon bi-sulfid (CS_2). Of these solvents tetra-chlorid of carbon has already been suggested as a solvent for carbonic acid gas in a fire extinguishing compound. The halogens have the property of cutting off the access of air to the seat of the fire on account of their high specific gravity, and of being non-inflammable themselves, while the solvents, referred to, are

either non-inflammable, or are converted into sulfur di-oxid, and carbonic acid, both of which agents are very efficient fire extinguishing means. Of the halogens, I prefer to employ bromin, and iodin. The extinguishing agents may be poured directly into the burning liquid, so as to become mixed therewith. The decomposition of the solvent in the manner referred to, and the liberation of vapors of the halogen, caused by the heat of the fire, produce a layer of non-inflammable gases of high specific gravity on top of the burning mass, whereby the access of air is cut off and the fire extinguished.

As a solvent for the halogens, any of the chlorin-substituted hydrocarbons may be used. The halogens may also be used alone without any solvent whatever.

What I claim and desire to secure by Letters Patent of the United States is:—

1. The process of extinguishing fires from burning benzin, kerosene oil, petroleum and other easily inflammable liquids consisting in adding free uncombined bromin to said burning liquids, substantially as herein described.

2. The herein described process of extinguishing fires which consists in treating the burning substances with a solution of free uncombined halogen elements in halogen substituted hydrocarbons.

3. The herein described process of extinguishing fires which consists in treating the burning substances with a solution of free uncombined bromin in a suitable solvent.

In witness whereof I have hereunto signed my name this 12th day of July 1907, in the presence of two subscribing witnesses.

MAX BRESLAUER.

Witnesses:

ARTHUR FORSTER,

ALVIS WITTMANN.