

UNITED STATES PATENT OFFICE.

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

PROCESS OF EXTINGUISHING BURNING BENZIN, &c.

955,316.

Specification of Letters Patent.

Patented Apr. 19, 1910.

No Drawing.

Application filed July 26, 1907. Serial No. 385,666.

To all whom it may concern:

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

This invention has reference to a new way of extinguishing flames and conflagrations from light, easily volatile hydrocarbons in bulk, such as benzin, petroleum, oil of turpentine, as well as the flames of burning mineral oils and vegetable oils, animal fats and the like which it is impossible to extinguish by water, both on account of the low specific gravity of the burning liquids which causes them to float on top of the water, and on account of their exceedingly high heat of combustion which cannot be lowered to an appreciable extent by the mere addition of water.

My invention is intended to overcome the difficulties, heretofore experienced in the attempts to quench fires of this kind by heaping sand, earth or the like on the seat of the fire, or by the application of compressed gases of high specific gravity, such as carbonic acid or sulfurous acid under pressure the application of which was restricted in view of the fact, that the containers, containing the compressed gases, had to be kept at a considerable distance from the seat of the fire, in order to prevent them from exploding and bursting by expansion. In my invention oxy-haloid compounds of sulfur are made to act upon the seat of the fire, these agents being converted by heat into sulfur dioxide and chlorine both of which are very efficient and powerful fire extinguishing agents. The oxy-compounds of sulfur

mentioned are preferably applied as liquids which may be thrown out in form of jets from sprinklers, fire engines, or from hand operated fire extinguishers by means of compressed gases, forced into the containers, containing the said fire extinguishing liquids. It is obvious, that such containers may be kept at a considerable distance from the seat of the fire, inasmuch as the compressed gases, contained therein, are only employed as a means of delivering the fire extinguishing liquid onto the seat of the fire.

Among the various oxy-haloid compounds of sulfur, suitable for the purpose in question, I may mention the following as instances:—Sulfuryl chloride, SO_2Cl_2 , thionyl chloride, SOCl_2 , sulfur-oxy-tetra-chloride, $\text{S}_2\text{O}_3\text{Cl}_4$, and pyro-sulfuryl-chloride, $\text{S}_2\text{O}_5\text{Cl}_2$. All of these form sulfur-dioxide, SO_2 , and chlorine gas by decomposition by heat, thionyl-chloride forming sulfur, sulfur-dioxide, and sulfur-mono-chloride SCl in the first place which are subsequently burned, to form sulfur dioxide, and chlorine.

It is evident, that instead of the oxy-chlorine-compounds of sulfur, the bromine, and iodine compounds may also be used.

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

The herein described process of extinguishing fires which consists in squirting a liquid, containing oxy-haloid-compounds of sulfur by means of compressed gases, thereby converting said liquid into jets and into a spray, and ejecting said spray and jets of liquid onto the seat of fire.

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,
ARON W. WIMANN.