



(51) International Patent Classification:

Not classified

(21) International Application Number:

PCT/GR2017/000028

(22) International Filing Date:

30 May 2017 (30.05.2017)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

20160100309 03 June 2016 (03.06.2016) GR

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(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

(54) Title: FIREFIGHTING METHOD BASED ON TUMID PERLITE

(57) Abstract: In a fire extinguishing method (multiple outbreaks of fire) based on the expanded perlite, which in cooperation with fire extinguishing vehicles, helicopters, airplanes, fire brigades, decreases to 1/10 the extinguishing time. During earthly intervention and putting out the fire, the raw material of expanded perlite is fed to the fire extinguishers through stationary or self-propelled containers-pots and special water-mixing components (a watery mixture of perlite), which is fired at the fireplaces. During airborne intervention and putting out the fire, the raw material of expanded perlite is fed to aerial fire extinguishers through containers-pots (specially constructed hatch with an impeller driven with the force of air generated by the movement of the aerial means of transport). Channelling the liquid mixture of expanded perlite to the multiple outbreaks of fire, it will inactivate the fire and at the same time, when it sits down to the damaged flora, it helps to quickly restore it.



## FIREFIGHTING METHOD BASED ON TUMID PERLITE

The present invention concerns a method of firefighting (sources of fire) which in cooperation with firefighting trucks, helicopters, planes and fire stations, it reduces the firefighting time by 1/10.

A firefighting method according to which when water is jetted at the fire along with a small quantity of tumid perlite, in which there is compressed air (capsules), the water enters the capsules of the perlite and  
5 protects itself because of the good heat protection and the inflammable activities of the perlite.

At the same time, layer of perlite (loose of small thickness), with encapsured water in its capsules, Which does not allows the entrance of air nor oxygen, contributing positively in the firefighting of the flame in a small amount of time without the fear or rebursting in fire.

The access of the firefighters is allowed more easily since there is no danger walking next to the sources  
10 of fire since there is no heating source and flaming gases after the perlite has covered the area.

On the onshore firefighting methods the jetting of perlite is faster with the assembly of special equipment which is linked to the base of the firefighting truck (in the outlet of the water hose connection) which will link the mobile truck with the perlite truck. The material (perlite) enters the hose of the firefighting vehicle and jets along with the water onto the flames.

15 The tank of the mobile vehicle receives small air pressure so that it will assist faster vacancy of the truck. The mobile perlite vehicle has the capability of transferring perlite in up to 4 firefighting vehicles at the same time.

The quantities of the transferred perlite depend on the perlite truck operator every time and on the quantity that is needed at the time.

20 In small fires, the firefighting vehicle adjusts to a small tank of 2 or 3 cubic meters for immediate firefighting.

The method of firefighting in small fires is easily achieved due to the special weight of the tumid perlite (100kg/m<sup>3</sup>).

When firefighting from the air, the firefighting plane/helicopter uses a tank (with special hatch and a fan that will move with the help of the air that is achieved with the move of the aircraft) of dry perlite which with  
25 the mix of water from the tanks of the aircraft or with the collection of water from the nearest water source

it will achieve its final form.

The quantities of perlite that will need to be jetted can be adjusted from the operator based on the needs and the amount of flame.

At the same time, because of its natural and chemical characteristics, tumid perlite has great stability and none toxic qualities and the use in firefighting will help in the fast recovery of the destroyed flora.

CLAIMS

1. Firefighting method with tumid perlite as a base.
2. Method based on the receivable 1, characterized as a first material in order to achieve the target of the firefighting, tumid perlite will be used in all sections.
3. Method according to receivable 1, that will concern the onshore firefighting, characterized as, mobile or  
5 fixed perlite tank, used for the filling and refiling of the perlite tank.
4. Method according to receivable 1, that will concern both the onshore and airborne firefighting, characterized as, special equipment that adjusts in the exit of the connection of the hose of the firefighting vehicle and used in a mixture of perlite with water.
5. Method according to receivable 1, characterized as, tank (special construction with hatch and fan that  
10 will move with the help created by the move of the aircraft), used for the airborne jetting of liquidated perlite in fire sources.