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The paper presents information about sound suppressors for small arms using spherical baffles. Data on patented products of this type are reported, beginning in 1910, when the sound suppressor design with such basic essential features was first patented. The design of patented sound suppressors and special features of their operation in accordance with inventors' description are considered in an orderly sequence.

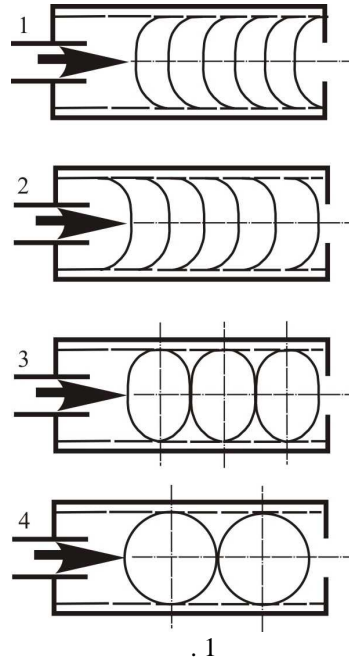
Information about the test sound suppressor with spherical baffles developed by the authors and the results of the analysis of publications considering special features of gas dynamic processes in the sound suppressor are presented.

A standard design and the operation of the sound suppressor with spherical baffles are described. The authors filed a patent application for this design.

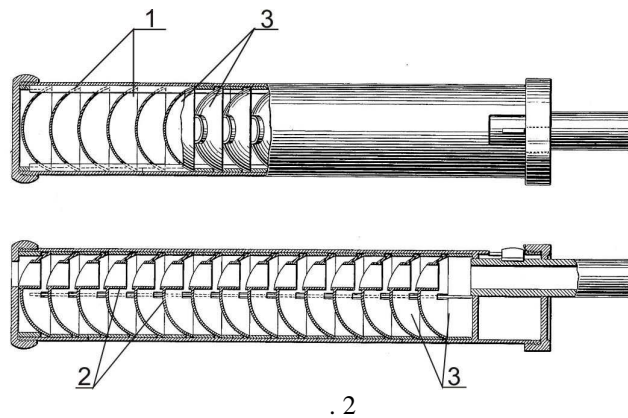
Conclusions relative to studies performed and the results obtained are reached and ways of further investigations are directed.

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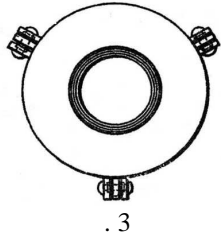
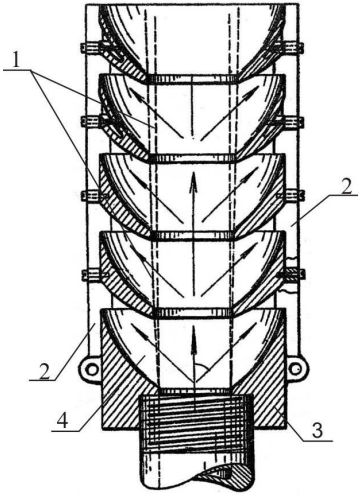


(.1.1),
(.1.2),
(.1.3) (.1.4).

24.05.1910 , J. H. Stinson [1] (959.400 .2).

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3,

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1.854.974
29.11.1930 [2] (.3)

» [1].

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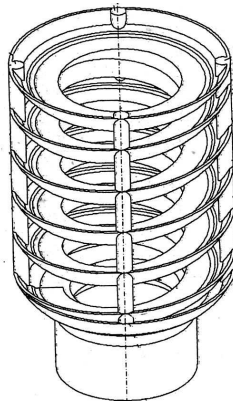
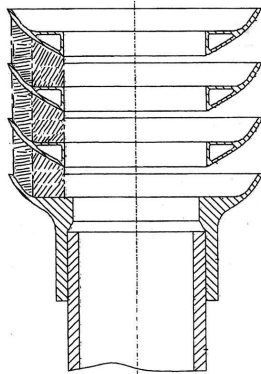
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2013/160330 1) (.4) [3].

/ 2013/058451 24.04.2012 (WO

(.3 .4.)



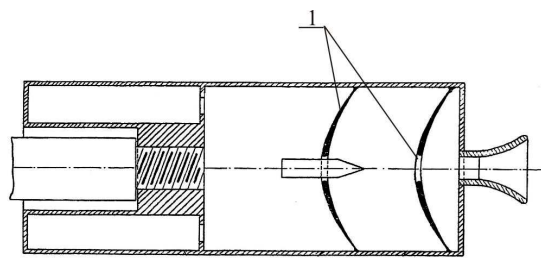
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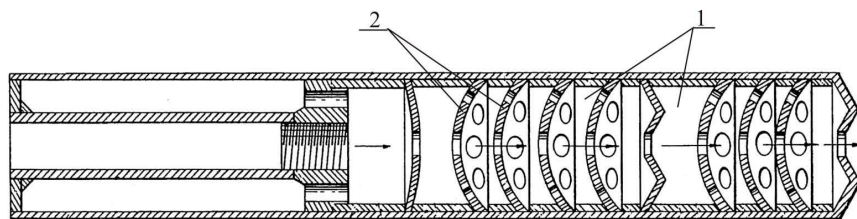
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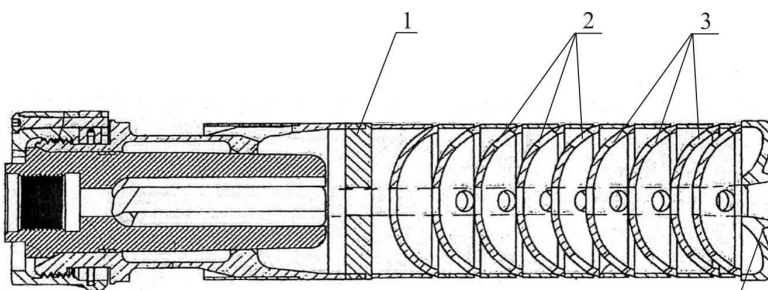
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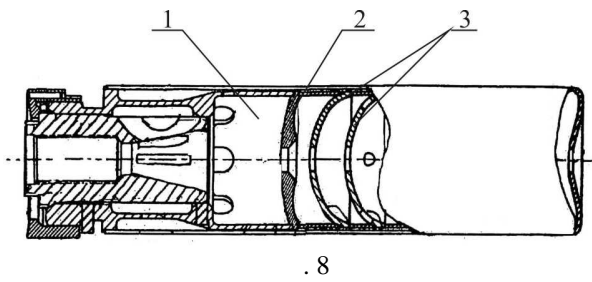
29.03.1988 [5] (.6).

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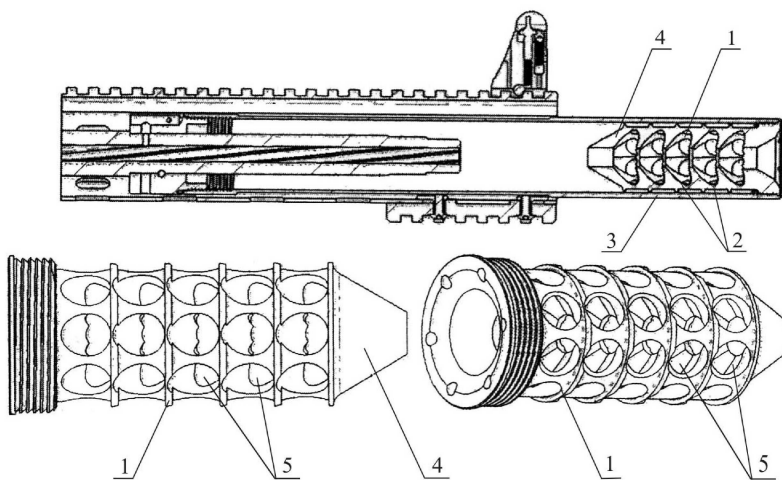
1315 04243 07.01.2013) (. 7) [6].

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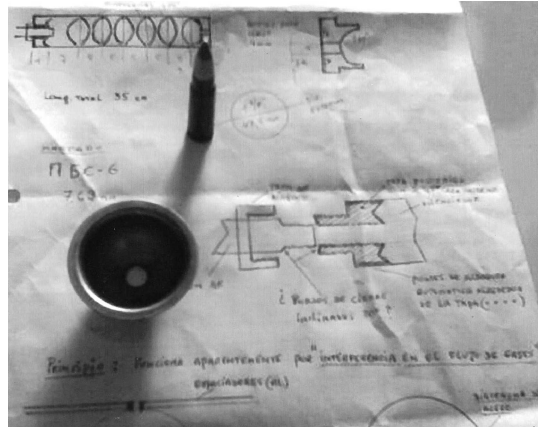
(pub. us.2007/0266 844A1)

26.02.2007 [7] (. 8).

1, 2, 3.



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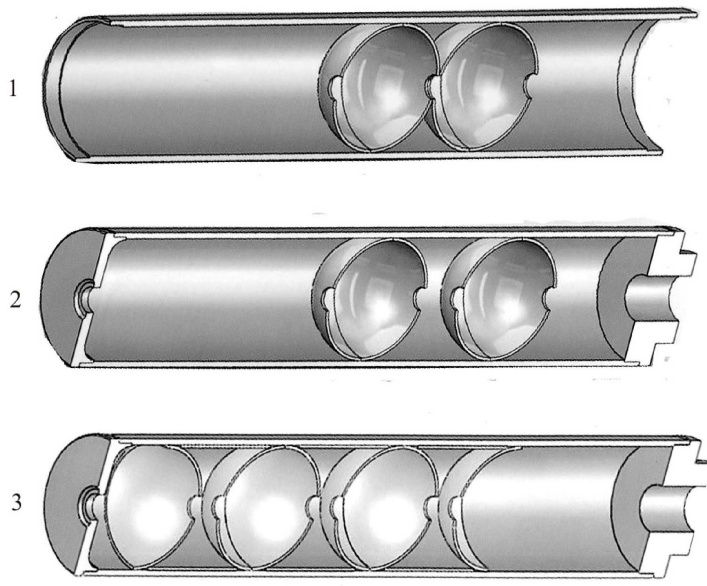
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[10].

$$X_p = C_x(q_\infty S_{mid})$$

C_x –

q_∞ –

S_{mid} –

2.3.3. 2.3.5

(≤ 1)

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60 – 90° ,

[11].

0,4 – 0,5

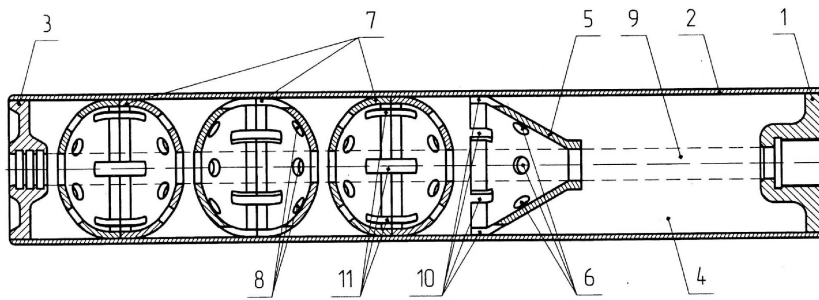
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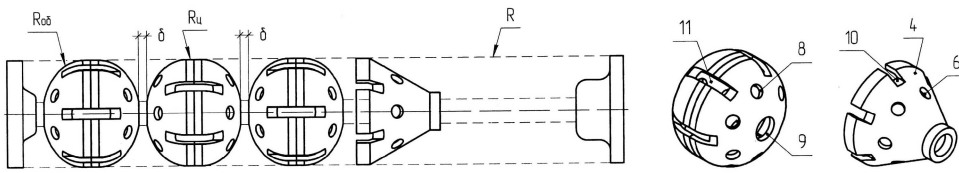
30°.

[12 – 23].



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2 R ,

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$\delta = 0,4 - 0,5$

7,

$R_{06} = 1,2R$,

R_u R ,

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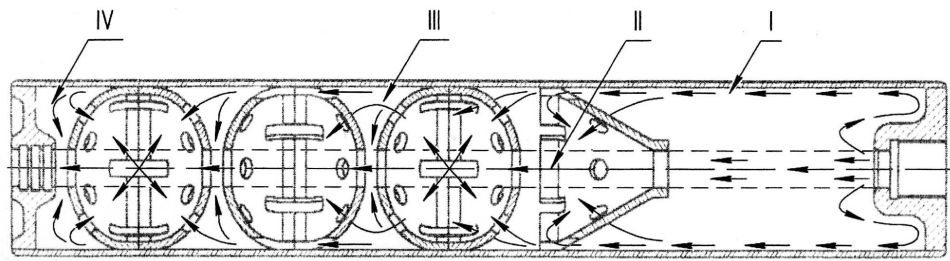
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4 (.13).



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10 11 (.13)

(. 16)

5,45; 5,56 7,62

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[24].

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18.11.14,
15.01.15