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(...) ,

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[5]

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d_i.

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[1],

[1, 2, 5]

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[5],

([5])

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(, -)

[5]

:

$$N = 1 + n, \tag{1}$$

n - , 2 ; N 3.

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) . - [5],

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\bar{S}_1 ,

\bar{v}_1

(1)

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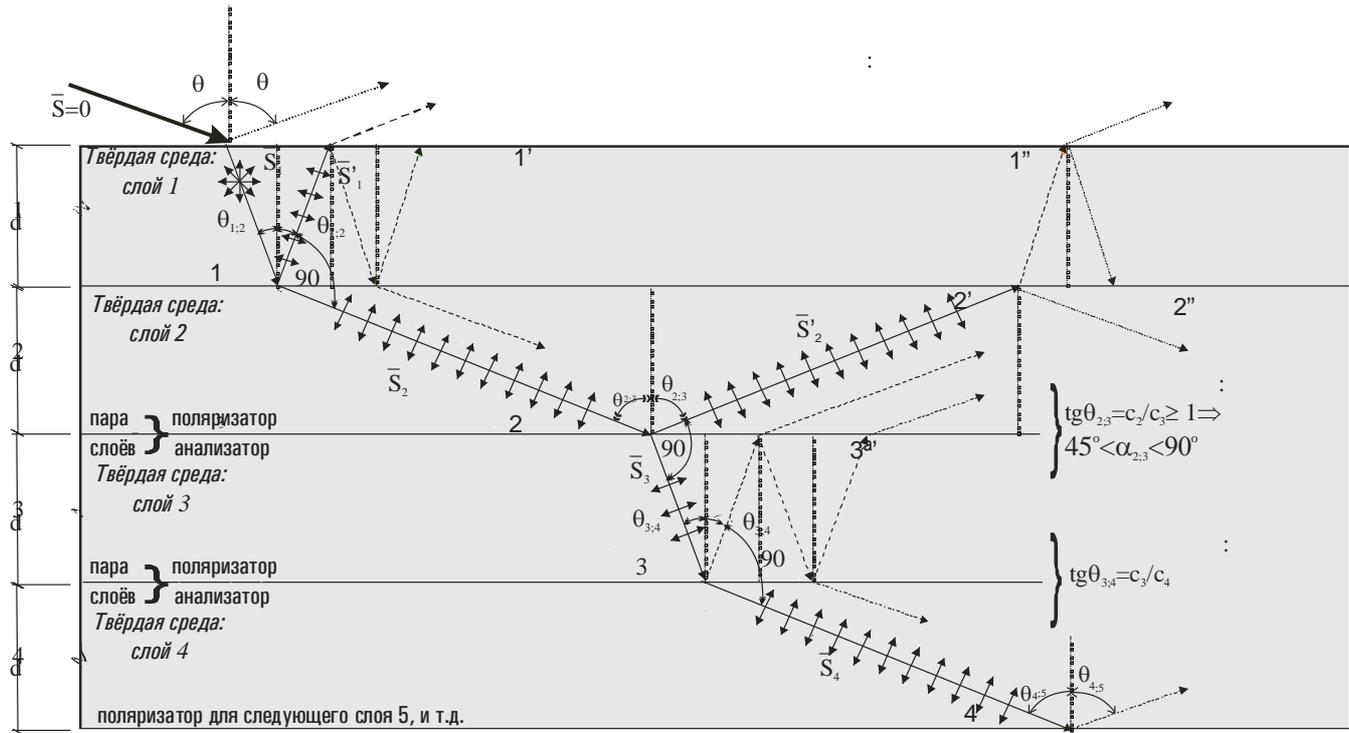
\bar{S}_1 ,

\bar{v}_1 ,

,

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1 -
 1'; 2'; 3'; ...
 2; 3; 4; ...

$45^\circ < \theta < 90^\circ$

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. 1.

[1, 2]

$$= \sqrt{G/\rho}, \quad (2)$$

$G -$

[5].

1, 2, \bar{S}_2 , \bar{S}_1 , \bar{S}_2

$$\begin{aligned} \operatorname{tg}\theta_{1;2} = c_1/c_2 &= \sqrt[4]{\frac{D_1\omega_1^2}{m_1} \cdot \frac{m_2}{D_2\omega_2^2}} = \sqrt[4]{\frac{E_1d_1^3\omega_1^2}{12(1-\mu_1^2)m_1} / \frac{E_2d_2^3\omega_2^2}{12(1-\mu_2^2)m_2}} = \\ &= \sqrt[4]{\frac{E_1d_1^3\omega_1^2 12(1-\mu_2^2)m_2}{12(1-\mu_1^2)m_1 E_2d_2^3\omega_2^2}} = \sqrt[4]{\frac{(1-\mu_2^2)\rho_2 E_1 d_1^2 \omega_1^2}{(1-\mu_1^2)\rho_1 E_2 d_2^2 \omega_2^2}} \end{aligned} \quad (3)$$

1; 2; 3; ... - $D_1; D_2; D_3; \dots$ (1; 2; 3; ...) ;

$$D = E \cdot d^3 / 12(1 - \mu^2), \quad (4)$$

1; 2; 3; ... - $\mu_1; \mu_2; \mu_3; \dots$; $1; 2; 3; \dots$; $= 2 f,$ (5)

$f_1; f_2; f_3; \dots$; $m_1; m_2; m_3; \dots$; $1; 2; 3; \dots$; $m = \cdot d$ (6)

$d_1; d_2; d_3; \dots$; $1; 2; 3; \dots$;

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$$1; 2; 3; \dots - \quad , / 3. \quad 2 \quad 3$$

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- 3,

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2 $\frac{3}{\bar{S}_3}$

2, 3,

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3.

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$$\text{tg } 2;3 = 2/3 = 4 \sqrt{\frac{(1-\mu_3^2)\rho_3 E_2 d_2^2 \omega_2^2}{(1-\mu_2^2)\rho_2 E_3 d_3^2 \omega_3^2}} \quad (7)$$

$$\text{tg } 1;2 \neq \text{tg } 2;3 \quad (8)$$

\bar{S}_3

2 3

2.

, ...

1

2,

3-

tg 1,

$$1) \begin{cases} 1 & 2; & 1/2 = \text{tg } 1;2 & 1; \\ 1,2 > 45 & , & & 1,2 = 90 . \end{cases} \quad (9)$$

$$2) \begin{cases} 1 & 2; & 1/2 = \text{tg } 1;2 & 1; \\ 1,2 < 45 & , & & 1,2 = 0 . \end{cases} \quad (10)$$

1

2

[3, . - 243, 273]

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»?

8. // :
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; 2 ; , . . .

sin = 1/2 (11)

(8)

1 2, -

? [4],

$\pi/2 \gg (\dots)$

> [3, . - 273]

2 1,

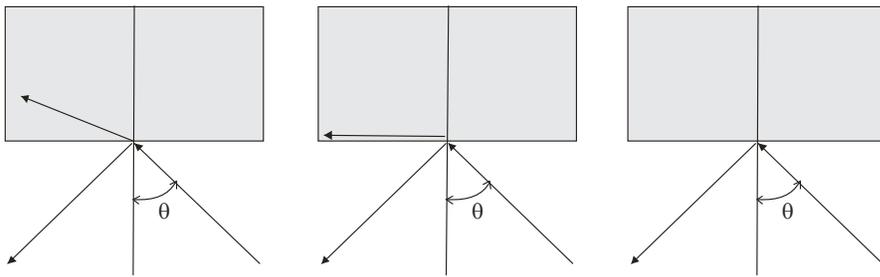
$1 < 2$.

.2. .2. ,

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[4].



) $\theta < \theta$:) $\theta = \theta$:) $\theta > \theta$:

.2.

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2,

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