

[1]

[2].

ó t=0.

R.

$$\frac{\partial H}{\partial r} + \frac{H}{r} = \gamma E; \tag{1}$$

$$\frac{\partial E}{\partial r} = \mu \frac{\partial H}{\partial t}, \tag{2}$$

H - ; E - ; r - ; μ - ;

r -

$$r \tag{1} \tag{2},$$

$$\frac{\partial^2 H}{\partial r^2} + \frac{1}{r} \frac{\partial H}{\partial r} - \frac{H}{r^2} = \gamma \mu \frac{\partial H}{\partial t}. \tag{3}$$

$$(3) \quad 0 \leq r \leq R \mp. \quad \ll - \gg$$

«+» ó R<sup>+</sup>.

H(r,t)

$$(r,t) \Big|_{t=0} = f(r). \tag{4}$$

$$(0,t) = 0; \quad (R^-,t) = \frac{i(t)}{2\pi R}. \tag{5}$$

(1), (3)-(5)

(5)  $(r = R)$ .

(3)  $0 \leq r \leq R^-$

(6)  $(r, -0) = H(r, +0)$

(1)  $(r, t)$   $(r, t)$ ,

$\delta = \gamma$  :

(7)  $(r, -0) = (r, +0)$

$t = 0$   $Di = i(+0) - i(-0)$ .

(5)

(8)  $\Delta H = \frac{\Delta i}{2\pi R}$

(3),  $r = R$   $t > 0$ .  $H$   $E$

(9)  $i(-0) = 2\pi\gamma \left( \int_0^{R^-} E(r, -0) r dr + \int_{R^-}^{R^+} E(r, -0) r dr \right)$ ;

$i(+0) = 2\pi\gamma \left( \int_0^{R^-} E(r, +0) r dr + \int_{R^-}^{R^+} E(r, +0) r dr \right)$ .

(7), :

(10)  $\gamma \int_{R^-}^{R^+} \Delta E(r, 0) r dr = \frac{\Delta i}{2\pi}$

$\Delta E(r, 0) \rightarrow \infty$ .

(10)

(50%

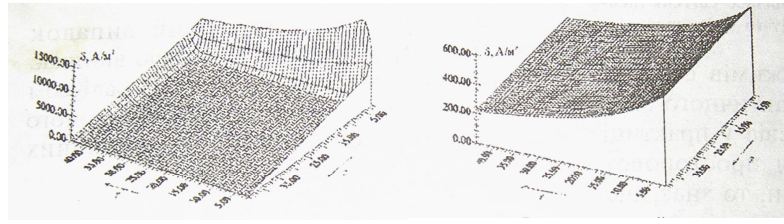
$HNO_3$ ),

$R_1 = 0,1( )$ ,

$R_2 = 0,2( )$   $h = 0,25( )$ ,

$\pm 100( )$ .  $\emptyset$   $\delta$

$r, z : R_1 \leq r \leq R_2 ; 0 \leq z \leq h$ .



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1.  $\emptyset$  , :

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[1]. . .

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[2]. . . , . .

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2000. ó 1(10), 2(11).