$$m_d(0)=\frac{(D_e+D_h)^2 n_0}{3\rho s^4}. \tag{26}$$

The quantity $m_d(0)$ is the deformation rest mass. For germanium, $m_d(0)=1.3\cdot 10^{-29}$ g, so that at low velocities the drop mass increases only by 3%. In crystals, where the density of the electron-hole liquid in the drop is much higher, the deformation mass of the drop can be comparable with its ordinary mass.

The increase of the drop mass considered here is connected with coherent interaction of all the particles of the drop with the lattice. Consequently m_d greatly exceeds (by a factor $(\hbar k_F/ms)^3$) the additional mass acquired by an individual pair as a result of the ordinary polaron effect.

According to (25), the deformation mass increases with increasing velocity, and becomes formally infinite at $\beta=1$. It must be borne in mind, however, that the mass m_d can come into play only at sufficiently large drop accelerations, when the inertia force is comparable with the friction force, i.e., $|\dot{\mathbf{v}}|\gtrsim \gamma v$ (γ is the kinematic friction coefficient). On the other hand, introduction of the deformation mass is possible only at sufficiently small accelerations that satisfy the inequality (29). Therefore formula (25) is meaningful for velocities such that $(1-\beta)^2 \gg \beta\gamma r_0/s$.

[1)] Direct calculation of the friction force by formula (1) (without explicit allowance for the condition $dE/dt=0$) leads to a factor $(1-t)$ under the integral sign in formula (3). If we put $x=1$, then formulas (2) and (3) coincide in fact with the corresponding formulas of Manoliu and Kittel,[4] who disregarded the change of the drop temperature in the course of its motion.

[2)] For a drop with sharp boundaries, the integral (17) diverges at large k. Actually the density $n(r)$ drops off to zero at the drop surface in a layer with a thickness of the order of $1/k_F$. The limit integration with respect to k should therefore be k_F, and it is this which leads to the logarithmic factor in (18).

[1] V. S. Bagaev, L. V. Keldysh, N. N. Sibel'din, and V. A. Tsvetkov, Zh. Eksp. Teor. Fiz. **70**, 702 (1976) [Sov. Phys. JETP **43**, 362 (1976)].

[2] J. E. Furneaux, J. P. Wolfe, and C. D. Jeffries, Solid State Commun. **20**, 317 (1976).

[3] N. V. Zamkovets, N. N. Sibel'din, V. B. Stopachinskiĭ, and V. A. Tsvetkov, Zh. Eksp. Teor. Fiz. **74**, 1147 (1978) [Sov. Phys. JETP **47**, 603 (1978).

[4] B. M. Ashkinadze and I. M. Fishman, Fiz. Tekh. Poluprovodn. **11**, 301 (1977) [Sov. Phys. Semicond. **11**, 179 (1977)].

[5] L. V. Keldysh, in: Éksitony i dyrki v poluprovodnikakh (Excitons and Holes in Semiconductors), Nauka, 1971, p. 5.

[6] T. S. Damen and J. M. Worlock, Proc. of Third Internat. Conf. on Light Scattering in Solides, Campinas, Brazil, 1975, p. 183.

[7] A. Manoliu and C. Kittel, Solid State Commun. **21**, 641 (1977).

[8] M. I. D'yakonov and A. V. Subashiev, Pis'ma Zh. Eksp. Teor. Fiz. **27**, 692 (1978) [JETP Lett. **27**, 655 (1978)].

[9] S. G. Tikhodeev, Kratk. Soobshch. Fiz. No. 5, 13 (1975).

[10] A. S. Alekseev, V. S. Bagaev, and T. I. Galkina, Zh. Eksp. Teor. Fiz. **63**, 1020 (1972) [Sov. Phys. JETP **36**, 536 (1973)].

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Formula (3.7) has the wrong sign and should be corrected to

$$\mathrm{Re}\,\sigma_{\parallel}=\ldots=-\bar{\sigma}F(\theta).$$

Thus, $\mathrm{Re}\,\sigma_{\parallel}\geqslant 0$.

