ERRATUM

To the article "On the Number of Classes of Gaussian Genus Whose Arithmetic Minimum Is Divisible by the Square of a Given Odd Number," by U. M. Pachev [Mathematical Notes, 55, No. 2, pp. 185-192 (1994)].

Russian page 125 of the previous issue [55, No. 1 (1994)] was inadvertently translated as part of the text on page 190 of the above article. The incorrect text starts from line 2 ("We thus have") and ends immediately above the proof of Theorem 2.

The translation of the correct text follows:

Therefore

$$w_1 \le w, \tag{24}$$

where w is the number of all the matrices of the form (23) when $Q_{i-1}'C_iQ_{i-1}$ runs through all the primitive matrices of norm $q^{2\delta+2}$ of a system of nonassociative from the right matrices and $Q_i' \in \{Q^{(1)}, ..., Q^{(\sigma_0(q^2))}\}$,

$$\#\left\{i \mid Q_i' = Q^{(1)} = Q\right\} < \left(1 - \frac{\gamma}{2}\right) \cdot \frac{s_1}{\sigma_0(q^2)}.$$

However, by proposition 3 of Section 2 (here conditions of type (2) are fulfilled) for given j and k the number of all primitive nonassociative from the right matrices $Q^{(j)}CQ^{(k)}$ of norm $q^{2\delta+2}$ as $\delta \to \infty$ is bounded by

$$\frac{q^{2\delta}}{(\sigma_0(q^2))^2}.$$

Therefore the number of matrices B' of the form (23) which for s_2 given indices i from the set $i = 1, ..., s_1$ satisfy the equality

$$Q_i' = Q^{(1)} = Q_i$$

and for the remaining s₁-s₂ indices i satisfy the equality

$$Q'_i = Q^{(j)} \neq Q \quad (j = 2, \ldots, \sigma_0(q^2)).$$

is equal to

$$\left(\frac{1}{\sigma_0(q^2)}\right)^{s_2} \left(1 - \frac{1}{\sigma_0(q^2)}\right)^{s_1 - s_2} q^{2s} \prod_{p/q} \left(1 + \frac{1}{p}\right) \prod_{k=1}^{s_1} (1 + o(1)).$$

Repeating verbatim the arguments presented in [8, p. 196], we obtain from this bound that for some fixed number θ

$$w \ll m^{\tau-\theta}$$

whence, in view of (22) and (24) we arrive at the bound

$$w' \ll m^{\tau - \theta}, \quad \theta = \theta(q) > 0;$$
 (25)

the constants appearing in the bound (25) depend only on q.

5°. On the other hand, in view of the key lemma in Section 2, proposition 4 for any $\varepsilon > 0$ will be

$$w' \gg m^{\tau - \epsilon},$$
 (26)

where the constants appearing in the bound (26) depend only on $\varepsilon > 0$, q and τ .

Setting $\varepsilon = \theta/2$ we obtain that for m sufficiently large the bounds (25) and (26) contradict each other. We thus arrive at a contradiction to the assumption in Section 2.

Theorem 1 is thus proved.