CORRECTION : ON REALIZATIONS OF SOME WHITEHEAD PRODUCTS

(This Journal, Vol. 12. pp. 1-30)

HIROSHI MIYAZAKI

(Received August 3, 1960)

In my paper above indicated, Lemma 8 is false. This fact was remarked by Mr. Y. Kodama and he gave the following counter example.

Let $H = Z + Z + \cdots\cdots$ be the direct sum of countable copies of the infinite cyclic group Z. Let $h : H \to G$ be a homomorphism from H onto the additive group G of rational numbers. Let H_0 be the kernel of h. Then it is easily seen that for H and H_0 the assumptions of Lemma 8 are satisfied. Therefore, if we assume that Lemma 8 is true, then H_0 is a direct summand of H. Hence $H = H_0 + V$ and $V \approx H/H_0 \approx G$. Since V which is a subgroup of a free group H is free, we have led to a contradiction.

In the proof of Theorem 4, Lemma 8 is used. Therefore slight modifications are needed.

Since group $\pi_7(K^5, K^4)$ is a direct sum of cyclic groups, by a theorem*) of the theory of groups, the group $j_7\pi_7(K^5)$ is a direct sum of cyclic groups. Therefore, in the proof of Theorem 4, we can replace Lemma 8 by Lemma 7. Then the proof is all right.

By the same arguments, in Theorems 8, 9, 10 of § 9 the assumptions that groups considered are fiinitely generated can be removed.

*) For example, cf. A. G. Kurosh, The theory of groups, Vol. 1, § 24.