18. Corrigenda for The Determination of the Imaginary Abelian Number Fields with Class Number One

Proc. Japan Acad., 68(A), No. 1, pp. 21-24 (1992)

By Ken YAMAMURA

Department of Mathematics, National Defence Academy (Communicated by Shokichi IYANAGA, M. J. A., March 12, 1992)

There are two more fields which were missing in the table attached to [1]. One of them is the field $Q(\sqrt{-7}, \sqrt{5}, \sqrt{-2})$ of degree 8 and conductor 280. We must add this field to the table as (7, 5, 8) in the column of the fields of the type $(2^*, 2, 2^*)$ with t=r=3. This field was counted in [1]. The another is the field $Q(\sqrt{-3}, \sqrt{5}, \zeta_7)$ of degree 24 and conductor 105. We must add this field to the table as

	$(2^*, 2, 6^*)$	24	(3, 5, 7)	-
--	-----------------	----	-----------	---

This field was not counted in [1]. Thus, there exist exactly 172 imaginary abelian number fields with class number one. Among them, 88 fields are maximal with respect to inclusion.

The type of the character group corresponding to the field of degree 20 expressed as (3, 4, 11) must be replaced as $(2^*, 2^*, 5)$.

We should restate the key idea as

(*) For any (proper) subfield F of K, h(F) divides h(K). This implies the idea stated in [1].

Proposition holds without any restriction on f.

Reference

[1] K. Yamanaka: The determination of the imaginary abelian number fields with class number one. Proc. Japan Acad., 68A, 21-24 (1992).