t35_tops_2 (TMLxHTzBS3JffveLXxzzeVAXCVnt2hzyigS)

October 27, 2020

Let $l1\_pre\_topc : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_setfam\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tops\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \Rightarrow (r1\_tarski\ (k5\_setfam\_1\ (u1\_struct\_0\ (k1\_pre\_topc\ X0\ X1))\ (k1\_tops\_2\ X0\ X1\ X2))\ (k5\_setfam\_1\ (u1\_struct\_0\ X0)\ X2)))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1\_tarski\ X0\ X1) \wedge (r1\_tarski\ X1\ X2)) \Rightarrow (r1\_tarski\ X0\ X2) \tag{2}$$

Theorem 1

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \Rightarrow ((r1\_tarski\ X1\ (k5\_setfam\_1\ (u1\_struct\_0\ (k1\_pre\_topc\ X0\ X1))\ (k1\_tops\_2\ X0\ X1\ X2))) \Rightarrow (r1\_tarski\ X1\ (k5\_setfam\_1\ (u1\_struct\_0\ X0)\ X2)))))$$