t21_e_siec (TMZX6JxcUqtFyghMRytWjsrR4eUyo9jHKrh)

October 27, 2020

Let $v2\_e\_siec : \iota \Rightarrow o$ be given. Let $v3\_e\_siec : \iota \Rightarrow o$ be given. Let $l1\_e\_siec : \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k13\_e\_siec : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12\_e\_siec : \iota \Rightarrow \iota$ be given. Let $k14\_e\_siec : \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $k2\_relat\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_relat\_1 : \iota \Rightarrow \iota$ be given. Let $u2\_e\_siec : \iota \Rightarrow \iota$ be given. Let $u1\_e\_siec : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1\_tarski\ X0\ X1) \wedge (r1\_tarski\ X2\ X1)) \Rightarrow (r1\_tarski\ (k2\_xboole\_0\ X0\ X2)\ X1) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(v1\_relat\_1\ X2) \Rightarrow ((r1\_tarski\ X2\ (k2\_zfmisc\_1\ X0\ X1)) \Rightarrow (r1\_tarski\ (k2\_relat\_1\ X2)\ (k2\_zfmisc\_1\ X1\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.r1\_tarski\ (k4\_relat\_1\ X0)\ (k2\_zfmisc\_1\ X0\ X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X0) \wedge (v1\_relat\_1\ X1)) \Rightarrow (v1\_relat\_1\ (k2\_xboole\_0\ X0\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.(l1\_e\_siec\ X0) \Rightarrow (v1\_relat\_1\ (u2\_e\_siec\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_e\_siec\ X0) \Rightarrow (v1\_relat\_1\ (u1\_e\_siec\ X0)) \tag{6}$$

Assume the following.

$$\forall X0.(l1\_e\_siec\ X0) \Rightarrow ((v2\_e\_siec\ X0) \Leftrightarrow ((r1\_tarski\ (u1\_e\_siec\ X0)\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))) \wedge ((r1\_tarski\ (u2\_e\_siec\ X0)\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))) \wedge ((k3\_relat\_1\ (u1\_e\_siec\ X0)\ (u1\_e\_siec\ X0) = u1\_e\_siec\ X0) \wedge ((k3\_relat\_1\ (u1\_e\_siec\ X0)\ (u2\_e\_siec\ X0) = u1\_e\_siec\ X0) \wedge ((k3\_relat\_1\ (u2\_e\_siec\ X0)\ (u2\_e\_siec\ X0) = u2\_e\_siec\ X0) \wedge (k3\_relat\_1\ (u2\_e\_siec\ X0)\ (u1\_e\_siec\ X0) = u2\_e\_siec\ X0)))))))) \tag{7}$$

Assume the following.

$$\forall X0.((v2\_e\_siec\ X0) \wedge ((v3\_e\_siec\ X0) \wedge (l1\_e\_siec\ X0))) \Rightarrow (k14\_e\_siec\ X0 = k2\_xboole\_0\ (k2\_xboole\_0\ (k2\_relat\_1\ (u1\_e\_siec\ X0))\ (u2\_e\_siec\ X0))\ (k4\_relat\_1\ (u1\_struct\_0\ X0))) \tag{8}$$

Assume the following.

$$\forall X0.((v2\_e\_siec\ X0) \wedge ((v3\_e\_siec\ X0) \wedge (l1\_e\_siec\ X0))) \Rightarrow (k13\_e\_siec\ X0 = k2\_relat\_1\ (k2\_xboole\_0\ (u1\_e\_siec\ X0)\ (u2\_e\_siec\ X0))) \tag{9}$$

Assume the following.

$$\forall X0.((v2\_e\_siec\ X0) \wedge ((v3\_e\_siec\ X0) \wedge (l1\_e\_siec\ X0))) \Rightarrow (k12\_e\_siec\ X0 = u1\_struct\_0\ X0) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k2\_xboole\_0\ X1\ X0 \tag{11}$$

Theorem 1

$$\forall X0.((v2\_e\_siec\ X0) \wedge ((v3\_e\_siec\ X0) \wedge (l1\_e\_siec\ X0))) \Rightarrow ((r1\_tarski\ (k13\_e\_siec\ X0)\ (k2\_zfmisc\_1\ (k12\_e\_siec\ X0)\ (k12\_e\_siec\ X0))) \wedge (r1\_tarski\ (k14\_e\_siec\ X0)\ (k2\_zfmisc\_1\ (k12\_e\_siec\ X0)\ (k12\_e\_siec\ X0))))$$