t136_sheffer2 (TMG-wyFD2XEqRHXVPWX8HMaPDandxt33jHJM)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v10\_sheffer1 : \iota \Rightarrow o$ be given. Let $v11\_sheffer1 : \iota \Rightarrow o$ be given. Let $v12\_sheffer1 : \iota \Rightarrow o$ be given. Let $l1\_sheffer1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k5\_sheffer1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v10\_sheffer1\ X0) \wedge ((v11\_sheffer1\ X0) \wedge ((v12\_sheffer1\ X0) \wedge (l1\_sheffer1\ X0))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (k5\_sheffer1\ X0\ (k5\_sheffer1\ X0\ X2\ X1)\ (k5\_sheffer1\ X0\ X2\ X2) = X2))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_sheffer1\ X0)) \Rightarrow ((v11\_sheffer1\ X0) \Leftrightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (k5\_sheffer1\ X0\ X1\ (k5\_sheffer1\ X0\ X2\ (k5\_sheffer1\ X0\ X2\ X2)) = k5\_sheffer1\ X0\ X1\ X1)))) \tag{2}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v10\_sheffer1\ X0) \wedge ((v11\_sheffer1\ X0) \wedge ((v12\_sheffer1\ X0) \wedge (l1\_sheffer1\ X0))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (k5\_sheffer1\ X0\ (k5\_sheffer1\ X0\ X3\ X2)\ (k5\_sheffer1\ X0\ X3\ (k5\_sheffer1\ X0\ X1\ (k5\_sheffer1\ X0\ X1\ X1))) = X3))))$$