t38_qc_lang2 (TMQ87EW2oPG87j1t61MnLG222dCwMvbJYPk)

October 27, 2020

Let $m1\_qc\_lang1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9\_qc\_lang1 : \iota \Rightarrow \iota$ be given. Let $v2\_qc\_lang2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_qc\_lang2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12\_qc\_lang2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11\_qc\_lang2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18\_qc\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k14\_qc\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13\_qc\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k9\_qc\_lang1\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k9\_qc\_lang1\ X0)) \Rightarrow ((k12\_qc\_lang2\ X0\ (k2\_qc\_lang2\ X0\ X1\ X2) = X1) \wedge ((k11\_qc\_lang2\ X0\ (k2\_qc\_lang2\ X0\ X1\ X2) = X2) \wedge (k18\_qc\_lang1\ X0\ (k2\_qc\_lang2\ X0\ X1\ X2) = k14\_qc\_lang1\ X0\ X1\ (k13\_qc\_lang1\ X0\ X2))))))) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k9\_qc\_lang1\ X0)) \Rightarrow ((v2\_qc\_lang2\ X1\ X0) \Leftrightarrow (\exists X2.(m1\_subset\_1\ X2\ (k9\_qc\_lang1\ X0)) \wedge (\exists X3.(m1\_subset\_1\ X3\ (k9\_qc\_lang1\ X0)) \wedge (X1 = k2\_qc\_lang2\ X0\ X2\ X3))))) \tag{2}$$

Theorem 1

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k9\_qc\_lang1\ X0)) \Rightarrow ((v2\_qc\_lang2\ X1\ X0) \Rightarrow (X1 = k2\_qc\_lang2\ X0\ (k12\_qc\_lang2\ X0\ X1)\ (k11\_qc\_lang2\ X0\ X1))))$$