t15_substlat (TMZZCzPsiczzUabCrro2nUTVhXutBGgiA9i)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_finsub\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_substlat : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k5\_finsub\_1\ (k4\_partfun1\ X0\ X1)))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (k5\_finsub\_1\ (k4\_partfun1\ X0\ X1)))\Rightarrow(k4\_substlat\ X0\ X1\ X2\ X3 = ReplSep2\ (toset\ (\lambda X4 : \iota.m1\_subset\_1\ X4\ (k4\_partfun1\ X0\ X1)))\ (\lambda X4 : \iota.\ toset\ (\lambda X5 : \iota.m1\_subset\_1\ X5\ (k4\_partfun1\ X0\ X1)))\ (\lambda X4 : \iota.\lambda X5 : \iota.(X4 \in X2)\wedge((X5 \in X3)\wedge(r1\_partfun1\ X4\ X5)))\ (\lambda X4 : \iota.\lambda X5 : \iota.k2\_xboole\_0\ X4\ X5))) \tag{1}$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k5\_finsub\_1\ (k4\_partfun1\ X0\ X1)))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (k5\_finsub\_1\ (k4\_partfun1\ X0\ X1)))\Rightarrow(\forall X4.\neg(X4 \in k4\_substlat\ X0\ X1\ X2\ X3)\wedge(\forall X5.\forall X6.\neg(X5 \in X2)\wedge((X6 \in X3)\wedge(X4 = k2\_xboole\_0\ X5\ X6)))))$$