t48_bciideal (TMcC3pz1ExaBEH2BpeYCSbdbiibhgmVujh2)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v3\_bcialg\_1 : \iota \Rightarrow o$ be given. Let $v4\_bcialg\_1 : \iota \Rightarrow o$ be given. Let $v5\_bcialg\_1 : \iota \Rightarrow o$ be given. Let $v7\_bcialg\_1 : \iota \Rightarrow o$ be given. Let $v8\_bcialg\_1 : \iota \Rightarrow o$ be given. Let $l2\_bcialg\_1 : \iota \Rightarrow o$ be given. Let $m2\_bcialg\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3\_bciideal : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_bcialg\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_bcialg\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v3\_bcialg\_1\ X0) \wedge ((v4\_bcialg\_1\ X0) \wedge ((v5\_bcialg\_1\ X0) \wedge ((v7\_bcialg\_1\ X0) \wedge ((v8\_bcialg\_1\ X0) \wedge (l2\_bcialg\_1\ X0)))))) \Rightarrow (((v3\_bciideal\ (k1\_tarski\ (k4\_struct\_0\ X0))\ X0) \wedge (m2\_bcialg\_1\ (k1\_tarski\ (k4\_struct\_0\ X0))\ X0)) \Leftrightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow ((r1\_bcialg\_1\ X0\ X1\ X2) \Rightarrow (X1 = k1\_bcialg\_1\ X0\ X2\ (k1\_bcialg\_1\ X0\ X2\ X1))))))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v3\_bcialg\_1\ X0) \wedge ((v4\_bcialg\_1\ X0) \wedge ((v5\_bcialg\_1\ X0) \wedge ((v7\_bcialg\_1\ X0) \wedge ((v8\_bcialg\_1\ X0) \wedge (l2\_bcialg\_1\ X0)))))) \Rightarrow ((\forall X1.(m2\_bcialg\_1\ X1\ X0) \Rightarrow ((v3\_bciideal\ X1\ X0) \wedge (m2\_bcialg\_1\ X1\ X0))) \Leftrightarrow ((v3\_bciideal\ (k1\_tarski\ (k4\_struct\_0\ X0))\ X0) \wedge (m2\_bcialg\_1\ (k1\_tarski\ (k4\_struct\_0\ X0))\ X0))) \tag{2}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v3\_bcialg\_1\ X0) \wedge ((v4\_bcialg\_1\ X0) \wedge ((v5\_bcialg\_1\ X0) \wedge ((v7\_bcialg\_1\ X0) \wedge ((v8\_bcialg\_1\ X0) \wedge (l2\_bcialg\_1\ X0)))))) \Rightarrow ((\forall X1.(m2\_bcialg\_1\ X1\ X0) \Rightarrow ((v3\_bciideal\ X1\ X0) \wedge (m2\_bcialg\_1\ X1\ X0))) \Leftrightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow ((r1\_bcialg\_1\ X0\ X1\ X2) \Rightarrow (X1 = k1\_bcialg\_1\ X0\ X2\ (k1\_bcialg\_1\ X0\ X2\ X1))))))$$