Synthesized solution for benchmark `00nondet.c`

`solution`

`(Complete), cond` d_{15}: `a > 0`

Case d_{15} :

$k_1 = O_{\texttt{i = nondet();}} \cdot N_{\texttt{j = nondet();}} \cdot (c_{\texttt{i > 0}} \cdot (d_{\texttt{a > 0}} \cdot B_{\texttt{() = B();}} + \neg d_{\texttt{a > 0}} \cdot C_{\texttt{() = C();}}) \cdot O_{\texttt{i = nondet();}})^* \neg c_{\texttt{i > 0}}$
$\cdot D_{\texttt{() = D();}} \cdot (a_{\texttt{j > 0}} \cdot (b_{\texttt{e > 0}} \cdot G_{\texttt{() = G();}} + \neg b_{\texttt{e > 0}} \cdot A_{\texttt{() = H();}}) \cdot N_{\texttt{j = nondet();}})^* \neg a_{\texttt{j > 0}}$

$k_2 = O_{\texttt{i = nondet();}} \cdot N_{\texttt{j = nondet();}} \cdot (c_{\texttt{i > 0}} \cdot (f_{\texttt{b > 0}} \cdot B_{\texttt{() = B();}} + \neg f_{\texttt{b > 0}} \cdot C_{\texttt{() = C();}}) \cdot O_{\texttt{i = nondet();}})^* \neg c_{\texttt{i > 0}}$
$\cdot D_{\texttt{() = D();}} \cdot (a_{\texttt{j > 0}} \cdot (e_{\texttt{d > 0}} \cdot G_{\texttt{() = G();}} + \neg e_{\texttt{d > 0}} \cdot A_{\texttt{() = H();}}) \cdot N_{\texttt{j = nondet();}})^* \neg a_{\texttt{j > 0}}$

`AComplete`

Axioms : $\{b = e, B = C\}$

$k_1 = O_{\texttt{i = nondet();}} \cdot N_{\texttt{j = nondet();}} \cdot (c_{\texttt{i > 0}} \cdot 1 \cdot B_{\texttt{() = B();}} \cdot O_{\texttt{i = nondet();}})^* \neg c_{\texttt{i > 0}}$
$\cdot D_{\texttt{() = D();}} \cdot (a_{\texttt{j > 0}} \cdot (b_{\texttt{e > 0}} \cdot G_{\texttt{() = G();}} + \neg b_{\texttt{e > 0}} \cdot A_{\texttt{() = H();}}) \cdot N_{\texttt{j = nondet();}})^* \neg a_{\texttt{j > 0}}$

$k_2 = O_{\texttt{i = nondet();}} \cdot N_{\texttt{j = nondet();}} \cdot (c_{\texttt{i > 0}} \cdot (f_{\texttt{b > 0}} \cdot B_{\texttt{() = B();}} + \neg f_{\texttt{b > 0}} \cdot C_{\texttt{() = C();}}) \cdot O_{\texttt{i = nondet();}})^* \neg c_{\texttt{i > 0}}$
$\cdot D_{\texttt{() = D();}} \cdot (a_{\texttt{j > 0}} \cdot (e_{\texttt{d > 0}} \cdot G_{\texttt{() = G();}} + \neg e_{\texttt{d > 0}} \cdot A_{\texttt{() = H();}}) \cdot N_{\texttt{j = nondet();}})^* \neg a_{\texttt{j > 0}}$

Case $\neg d_{15}$:

$k_1 = O_{\texttt{i = nondet();}} \cdot N_{\texttt{j = nondet();}} \cdot (c_{\texttt{i > 0}} \cdot (d_{\texttt{a > 0}} \cdot B_{\texttt{() = B();}} + \neg d_{\texttt{a > 0}} \cdot C_{\texttt{() = C();}}) \cdot O_{\texttt{i = nondet();}})^* \neg c_{\texttt{i > 0}}$
$\cdot D_{\texttt{() = D();}} \cdot (a_{\texttt{j > 0}} \cdot (b_{\texttt{e > 0}} \cdot G_{\texttt{() = G();}} + \neg b_{\texttt{e > 0}} \cdot A_{\texttt{() = H();}}) \cdot N_{\texttt{j = nondet();}})^* \neg a_{\texttt{j > 0}}$

$k_2 = O_{\texttt{i = nondet();}} \cdot N_{\texttt{j = nondet();}} \cdot (c_{\texttt{i > 0}} \cdot (f_{\texttt{b > 0}} \cdot B_{\texttt{() = B();}} + \neg f_{\texttt{b > 0}} \cdot C_{\texttt{() = C();}}) \cdot O_{\texttt{i = nondet();}})^* \neg c_{\texttt{i > 0}}$
$\cdot D_{\texttt{() = D();}} \cdot (a_{\texttt{j > 0}} \cdot (e_{\texttt{d > 0}} \cdot G_{\texttt{() = G();}} + \neg e_{\texttt{d > 0}} \cdot A_{\texttt{() = H();}}) \cdot N_{\texttt{j = nondet();}})^* \neg a_{\texttt{j > 0}}$

`AComplete`

Axioms : $\{b = e, C = B\}$

$k_1 = O_{\texttt{i = nondet();}} \cdot N_{\texttt{j = nondet();}} \cdot (c_{\texttt{i > 0}} \cdot 1 \cdot C_{\texttt{() = C();}} \cdot O_{\texttt{i = nondet();}})^* \neg c_{\texttt{i > 0}}$
$\cdot D_{\texttt{() = D();}} \cdot (a_{\texttt{j > 0}} \cdot (b_{\texttt{e > 0}} \cdot G_{\texttt{() = G();}} + \neg b_{\texttt{e > 0}} \cdot A_{\texttt{() = H();}}) \cdot N_{\texttt{j = nondet();}})^* \neg a_{\texttt{j > 0}}$

$k_2 = O_{\texttt{i = nondet();}} \cdot N_{\texttt{j = nondet();}} \cdot (c_{\texttt{i > 0}} \cdot (f_{\texttt{b > 0}} \cdot B_{\texttt{() = B();}} + \neg f_{\texttt{b > 0}} \cdot C_{\texttt{() = C();}}) \cdot O_{\texttt{i = nondet();}})^* \neg c_{\texttt{i > 0}}$
$\cdot D_{\texttt{() = D();}} \cdot (a_{\texttt{j > 0}} \cdot (e_{\texttt{d > 0}} \cdot G_{\texttt{() = G();}} + \neg e_{\texttt{d > 0}} \cdot A_{\texttt{() = H();}}) \cdot N_{\texttt{j = nondet();}})^* \neg a_{\texttt{j > 0}}$