**Figure 5.1**

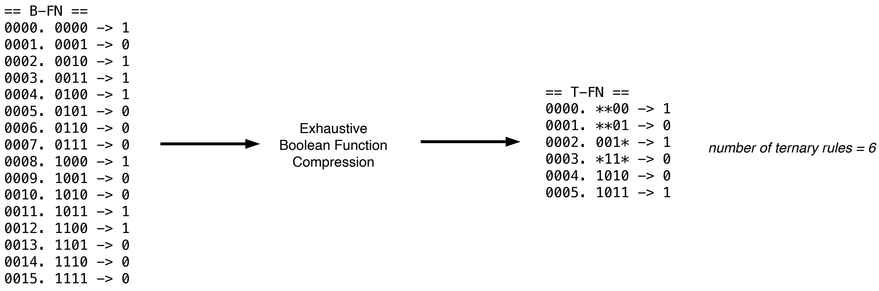



**Figure 5.2**

```
== B-FN ==
0000. 0000 -> 1
0001. 0001 -> 0
0002. 0010 -> 1
0003. 0011 -> 1
0004. 0100 -> 1
0005. 0101 -> 0
0006. 0110 -> 0
0007. 0111 -> 0
0008. 1000 -> 1
0009. 1001 -> 0
0010. 1010 -> 0
0011. 1011 -> 1
0012. 1100 -> 1
0013. 1101 -> 0
0014. 1110 -> 0
0015. 1111 -> 0

== T-FN <child number>.[<parent T-FN number>
<parent wildcard number>] ==

   ----- NTR = 1 -----

== T-FN 0. == NO
0000. **** -> z

   ----- NTR = 2 -----

== T-FN 0. [0 0] ==  NO
0000. 0*** -> z
0001. 1*** -> z

== T-FN 1. [0 1] ==  NO
0000. *0** -> z
0001. *1** -> z

== T-FN 2. [0 2] ==  NO
0000. **0* -> z
0001. **1* -> z

== T-FN 3. [0 3] ==  NO
0000. ***0 -> z
0001. ***1 -> z

   ----- NTR = 3 -----

== T-FN 0. [0 0] ==  NO
0000. 00** -> z
0001. 01** -> z
0002. 1*** -> z

== T-FN 1. [0 1] ==  NO
0000. 0*0* -> z
0001. 0*1* -> z
0002. 1*** -> z

== T-FN 2. [0 2] ==  NO
0000. 0**0 -> z
0001. 0**1 -> z
0002. 1*** -> z

== T-FN 3. [0 3] ==  NO
0000. 0*** -> z
0001. 10** -> z
0002. 11** -> z

== T-FN 4. [0 4] ==  NO
0000. 0*** -> z
0001. 1*0* -> z
0002. 1*1* -> z

...

== T-FN 22. [3 4] ==  NO
0000. ***0 -> z
0001. *0*1 -> z
0002. *1*1 -> z

== T-FN 23. [3 5] ==  NO
0000. ***0 -> z
0001. **01 -> z
0002. **11 -> z

   ----- NTR = 4 -----

== T-FN 0. [0 0] ==  NO
0000. 000* -> z
0001. 001* -> z
0002. 01** -> z
0003. 1*** -> z

== T-FN 1. [0 1] ==  NO
0000. 00*0 -> z
0001. 00*1 -> z
0002. 01** -> z
0003. 1*** -> z

== T-FN 2. [0 2] ==  NO
0000. 00** -> z
0001. 010* -> z
0002. 011* -> z
0003. 1*** -> z

== T-FN 3. [0 3] ==  NO
0000. 00** -> z
0001. 01*0 -> z
0002. 01*1 -> z
0003. 1*** -> z

== T-FN 4. [0 4] ==  NO
0000. 00** -> z
0001. 01** -> z
0002. 10** -> z
0003. 11** -> z

...

== T-FN 166. [23 5] ==  NO
0000. ***0 -> z
0001. **01 -> z
0002. 0*11 -> z
0003. 1*11 -> z

== T-FN 167. [23 6] ==  NO
0000. ***0 -> z
0001. **01 -> z
0002. *011 -> z
0003. *111 -> z
```

```
   ----- NTR = 5 -----

== T-FN 0. [0 0] ==  NO
0000. 0000 -> z
0001. 0001 -> z
0002. 001* -> z
0003. 01** -> z
0004. 1*** -> z

== T-FN 1. [0 1] ==  NO
0000. 000* -> z
0001. 0010 -> z
0002. 0011 -> z
0003. 01** -> z
0004. 1*** -> z

== T-FN 2. [0 2] ==  NO
0000. 000* -> z
0001. 001* -> z
0002. 010* -> z
0003. 011* -> z
0004. 1*** -> z

== T-FN 3. [0 3] ==  NO
0000. 000* -> z
0001. 001* -> z
0002. 01*0 -> z
0003. 01*1 -> z
0004. 1*** -> z

...

== T-FN 1246. [167 5] ==  NO
0000. ***0 -> z
0001. **01 -> z
0002. 0011 -> z
0003. *111 -> z
0004. 1011 -> z

== T-FN 1247. [167 6] ==  NO
0000. ***0 -> z
0001. **01 -> z
0002. *011 -> z
0003. 0111 -> z
0004. 1111 -> z

   ----- NTR = 6 -----

== T-FN 0. [0 0] ==  NO
0000. 0000 -> z
0001. 0001 -> z
0002. 0010 -> z
0003. 0011 -> z
0004. 01** -> z
0005. 1*** -> z

== T-FN 1. [0 1] ==  NO
0000. 0000 -> z
0001. 0001 -> z
0002. 001* -> z
0003. 010* -> z
0004. 011* -> z
0005. 1*** -> z

== T-FN 2. [0 2] ==  NO
0000. 0000 -> z
0001. 0001 -> z
0002. 001* -> z
0003. 01*0 -> z
0004. 01*1 -> z
0005. 1*** -> z

== T-FN 3. [0 3] ==  NO
0000. 0000 -> z
0001. 0001 -> z
0002. 001* -> z
0003. 01** -> z
0004. 10** -> z
0005. 11** -> z

...

== T-FN 5787. [768 3] ==  NO
0000. **00 -> z
0001. *001 -> z
0002. 001* -> z
0003. *101 -> z
0004. *11* -> z
0005. 101* -> z

== T-FN 5788. [768 4] ==  NO
0000. **00 -> z
0001. **01 -> z
0002. 0010 -> z
0003. 0011 -> z
0004. *11* -> z
0005. 101* -> z

== T-FN 5789. [768 5] ==  YES
0000. **00 -> 1
0001. **01 -> 0
0002. 001* -> 1
0003. *11* -> 0
0004. 1010 -> 0
0005. 1011 -> 1


number of candidate T-FNs generated = 7235
```