```c
struct fox *fox_search(struct rb_root *root, unsigned long ideal_length)
{
  struct rb_node *node = root->rb_node;

  while (node) {
    struct fox *a_fox = container_of(node, struct fox, node);

    int result;

    result = tail_compare(ideal_length, a_fox->tail_length);

    if (result < 0)
      node = node->rb_left;
    else if (result > 0)
      node = node->rb_right;
    else
      return a_fox;
  }
  return NULL;
}
```