



Figure 3: Example Trie with Rings ~~PPPPPPPPPPPPPPPPPPPP TBD~~

becomes h. See Figure 3. The parent of h is u. The node h of course has no children, and there is no meaning yet for either hic(h), or ltr(h). We define hic(h) as u, and ltr(h) = dot. Thus, for all cellids x, other than the rootid, either hic(hic(x)) = x or hic(x) = nilid.

```
type ringed-trie := trie except (
  function childrenq(u: cids) :=
    value q: seq cids such that
    if (
      hic(u) = nilid => q = [];
      else => (
        q[1] = hic(u),
        ltr(q[1]) = hdr,
        hic(q[1]) = u,
        nxt(q[1]) = q[#],
        for i: 1..#-1 (
          q[i] = nxt(q[i+1]),
        )
      )
    )
)
```