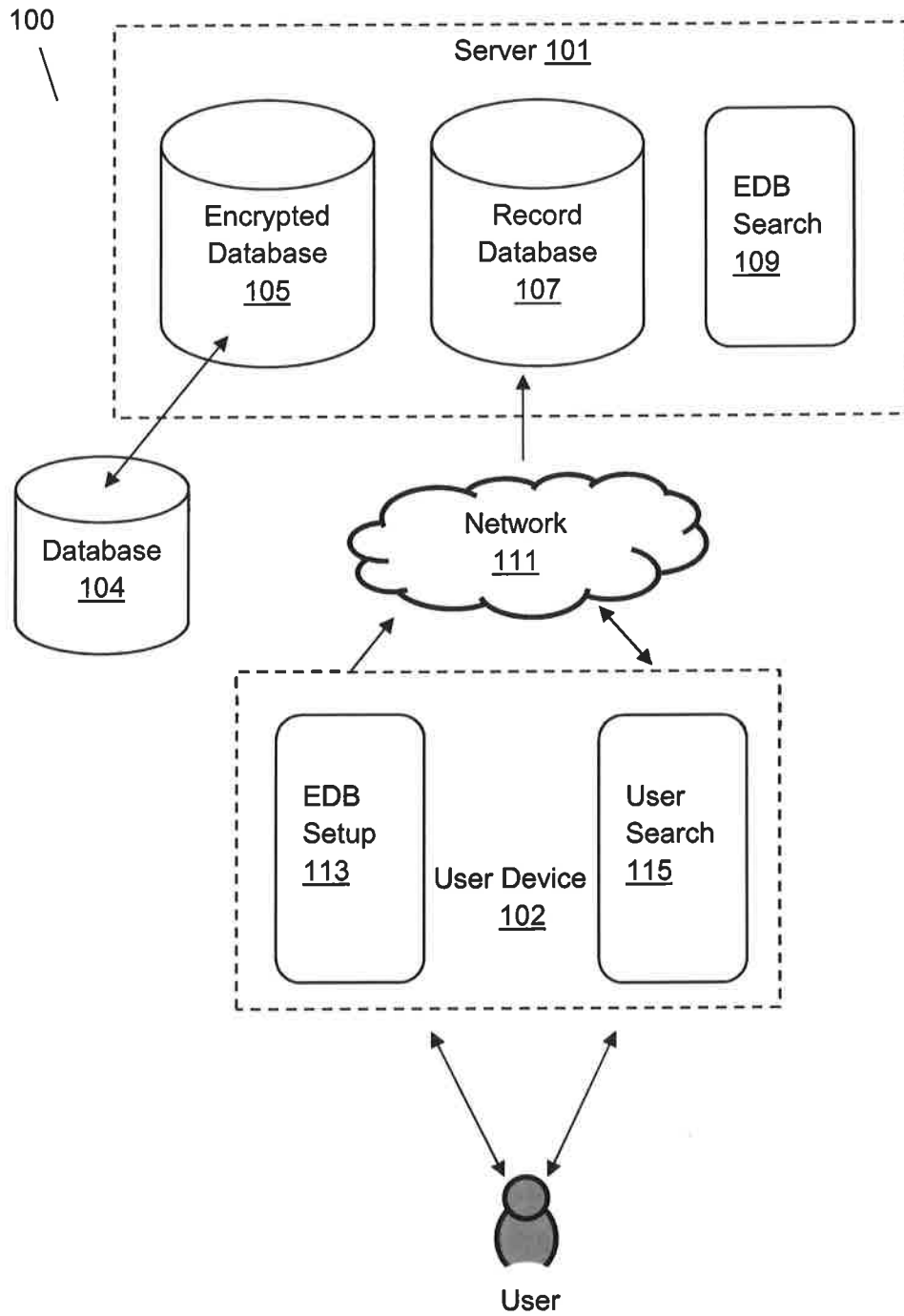


**FIGURE 1**

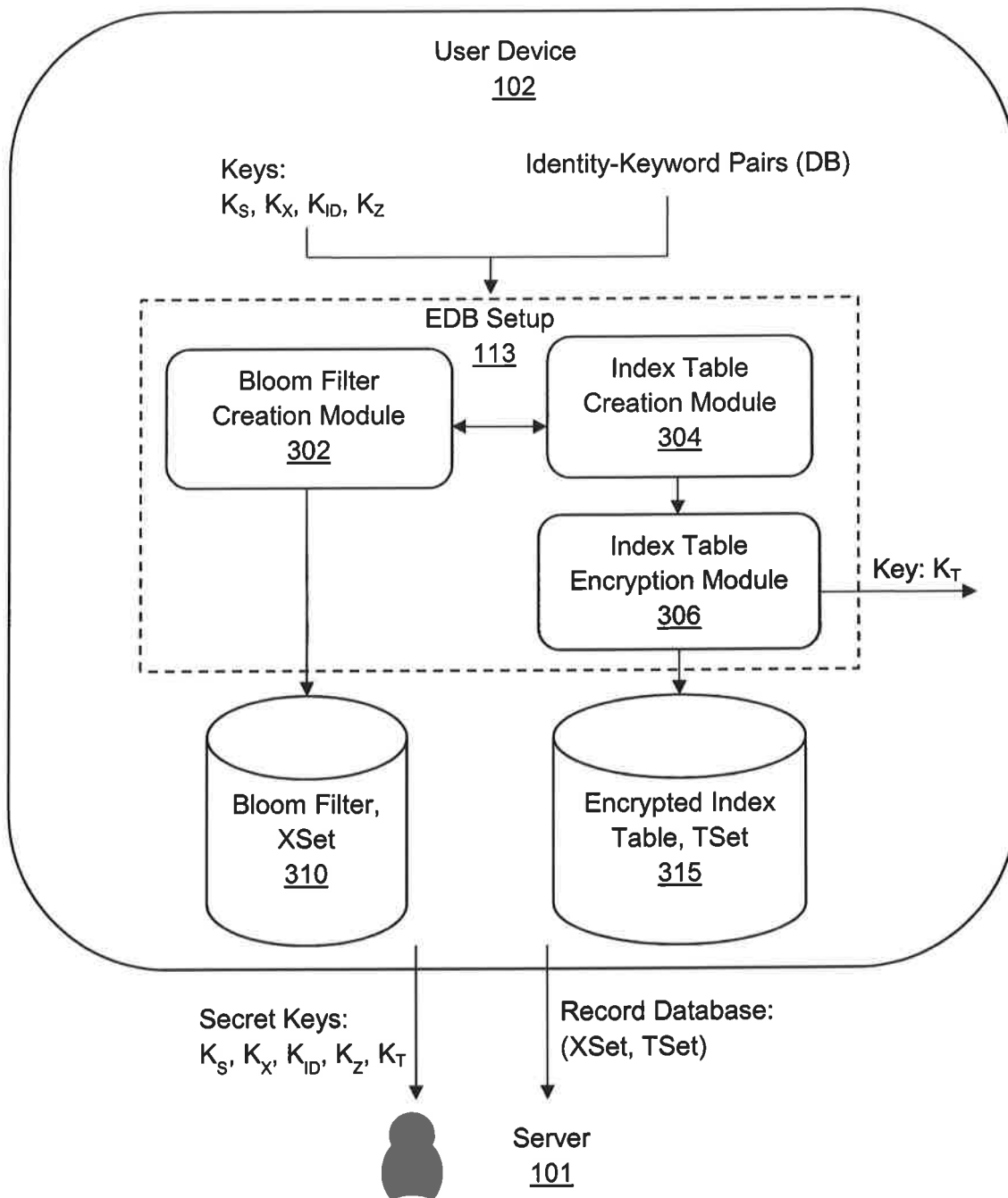
205

File ID	Item 1	Item 2	Item 3	Item 4	Item 5	Keywords
1	w ₁	w ₂	w ₃	w ₄	w ₅	w ₁ , w ₂ , w ₃ , w ₄ , w ₅
2	w ₆	w ₁	w ₂	w ₅	w ₇	w ₆ , w ₁ , w ₂ , w ₅ , w ₇
3	w ₈	w ₉	w ₄	w ₂	w ₁	w ₈ , w ₉ , w ₄ , w ₂ , w ₁
4	w ₁₀	w ₃	w ₄	w ₅	w ₇	w ₁₀ , w ₃ , w ₄ , w ₅ , w ₇
5	w ₁₁	w ₂	w ₃	w ₅	w ₇	w ₁₁ , w ₂ , w ₃ , w ₅ , w ₇
6	w ₁₂	w ₁	w ₃	w ₅	w ₄	w ₁₂ , w ₁ , w ₃ , w ₅ , w ₄

Identity-Keyword Pair Record =

{(1, w₁), (1, w₂), (1, w₃), (1, w₄), (1, w₅),
 (2, w₆), (2, w₁), (2, w₂), (2, w₅), (2, w₇),
 (3, w₈), (3, w₉), (3, w₄), (3, w₂), (3, w₁),
 (4, w₁₀), (4, w₃), (4, w₄), (4, w₅), (4, w₇),
 (5, w₁₁), (5, w₂), (5, w₃), (5, w₅), (5, w₇),
 (6, w₁₂), (6, w₁), (6, w₃), (6, w₅), (6, w₄)}

FIGURE 2

**FIGURE 3**

TSet (Encrypted Index Table):-

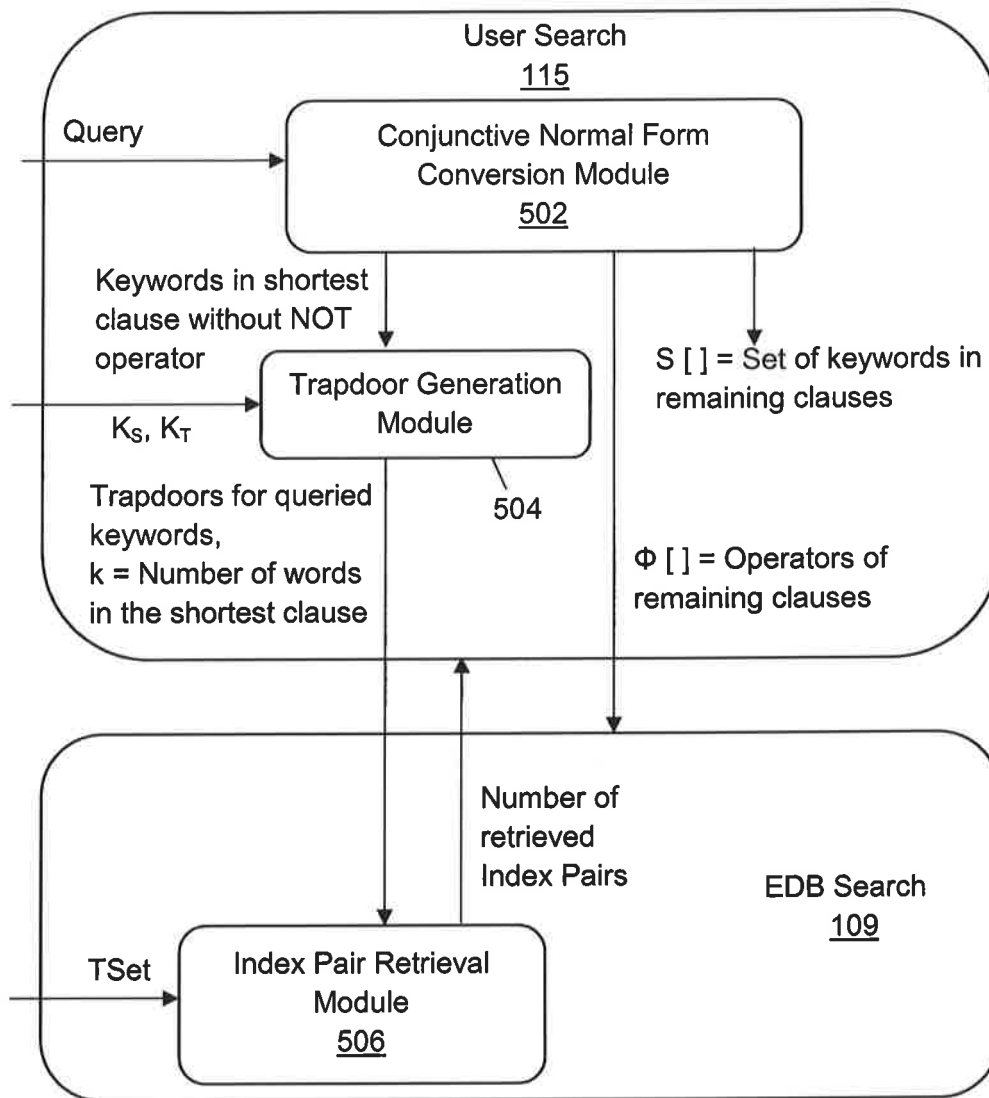
q_i 402	t (Index Pairs) 404
q_1	$(e_1, y_1), (e_2, y_2), (e_3, y_3), (e_4, y_4)$
q_2	$(e_5, y_5), (e_6, y_6), (e_7, y_7), (e_8, y_8)$
q_3	$(e_9, y_9), (e_{10}, y_{10}), (e_{11}, y_{11}), (e_{12}, y_{12})$
q_4	$(e_{13}, y_{13}), (e_{14}, y_{14}), (e_{15}, y_{15}), (e_{16}, y_{16})$
q_5	$(e_{17}, y_{17}), (e_{18}, y_{18}), (e_{19}, y_{19}), (e_{20}, y_{20}), (e_{21}, y_{21})$
q_6	(e_{22}, y_{22})
q_7	$(e_{23}, y_{23}), (e_{24}, y_{24}), (e_{25}, y_{25})$
q_8	(e_{26}, y_{26})
q_9	(e_{27}, y_{27})
q_{10}	(e_{28}, y_{28})
q_{11}	(e_{29}, y_{29})
q_{12}	(e_{30}, y_{30})

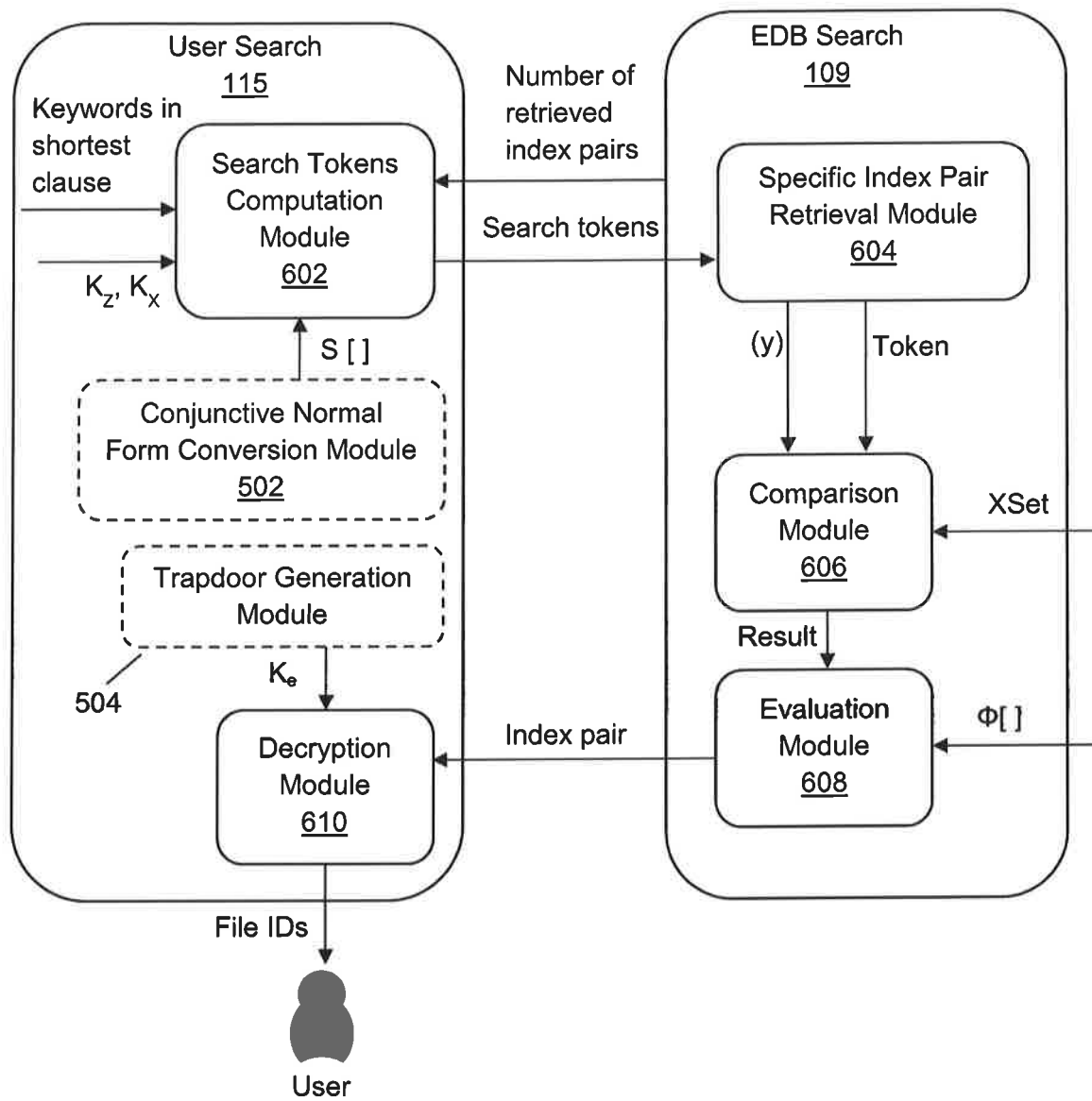
XSet (Bloom Filter):-

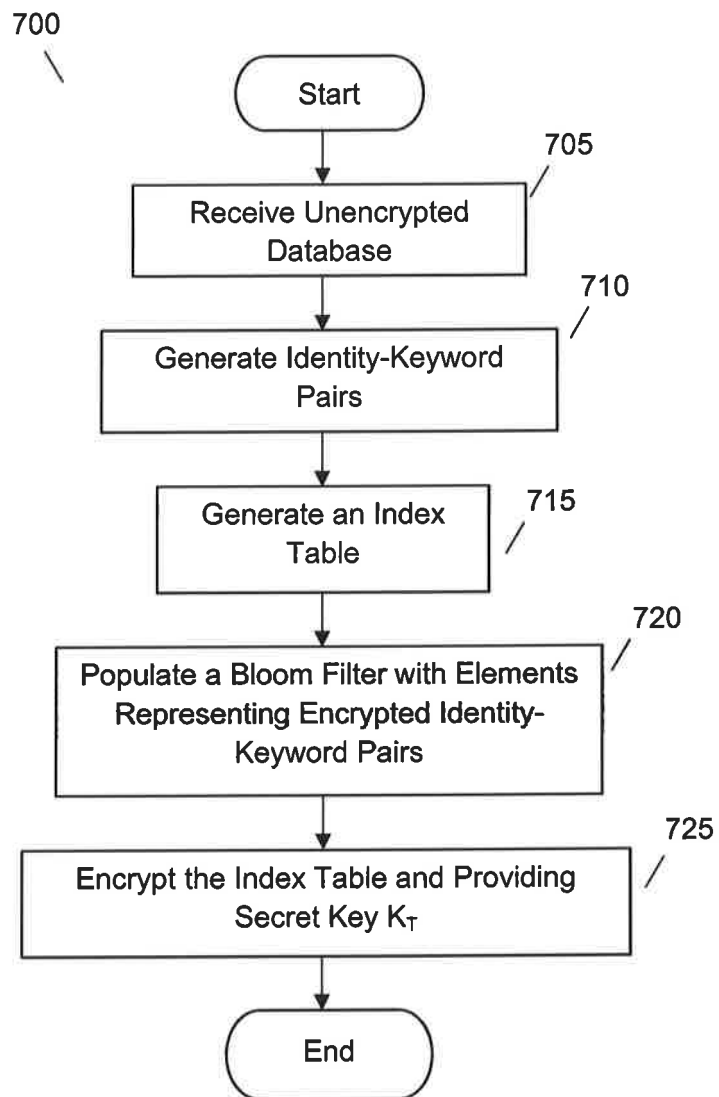
406

$g_{Fp(Kx, W1).Xid1}$	$g_{Fp(Kx, W1).Xid2}$	$g_{Fp(Kx, W1).Xid3}$	$g_{Fp(Kx, W1).Xid6}$	$g_{Fp(Kx, W2).Xid1}$	$g_{Fp(Kx, W2).Xid2}$
$g_{Fp(Kx, W2).Xid3}$	$g_{Fp(Kx, W2).Xid5}$	$g_{Fp(Kx, W3).Xid1}$	$g_{Fp(Kx, W3).Xid4}$	$g_{Fp(Kx, W3).Xid5}$	$g_{Fp(Kx, W3).Xid6}$
$g_{Fp(Kx, W4).Xid1}$	$g_{Fp(Kx, W4).Xid3}$	$g_{Fp(Kx, W4).Xid4}$	$g_{Fp(Kx, W4).Xid6}$	$g_{Fp(Kx, W5).Xid1}$	$g_{Fp(Kx, W5).Xid2}$
$g_{Fp(Kx, W5).Xid4}$	$g_{Fp(Kx, W5).Xid5}$	$g_{Fp(Kx, W5).Xid6}$	$g_{Fp(Kx, W6).Xid2}$	$g_{Fp(Kx, W7).Xid2}$	$g_{Fp(Kx, W7).Xid4}$
$g_{Fp(Kx, W7).Xid5}$	$g_{Fp(Kx, W8).Xid3}$	$g_{Fp(Kx, W9).Xid3}$	$g_{Fp(Kx, W10).Xid4}$	$g_{Fp(Kx, W11).Xid5}$	$g_{Fp(Kx, W12).Xid6}$

FIGURE 4

**FIGURE 5**

**FIGURE 6**

**FIGURE 7**

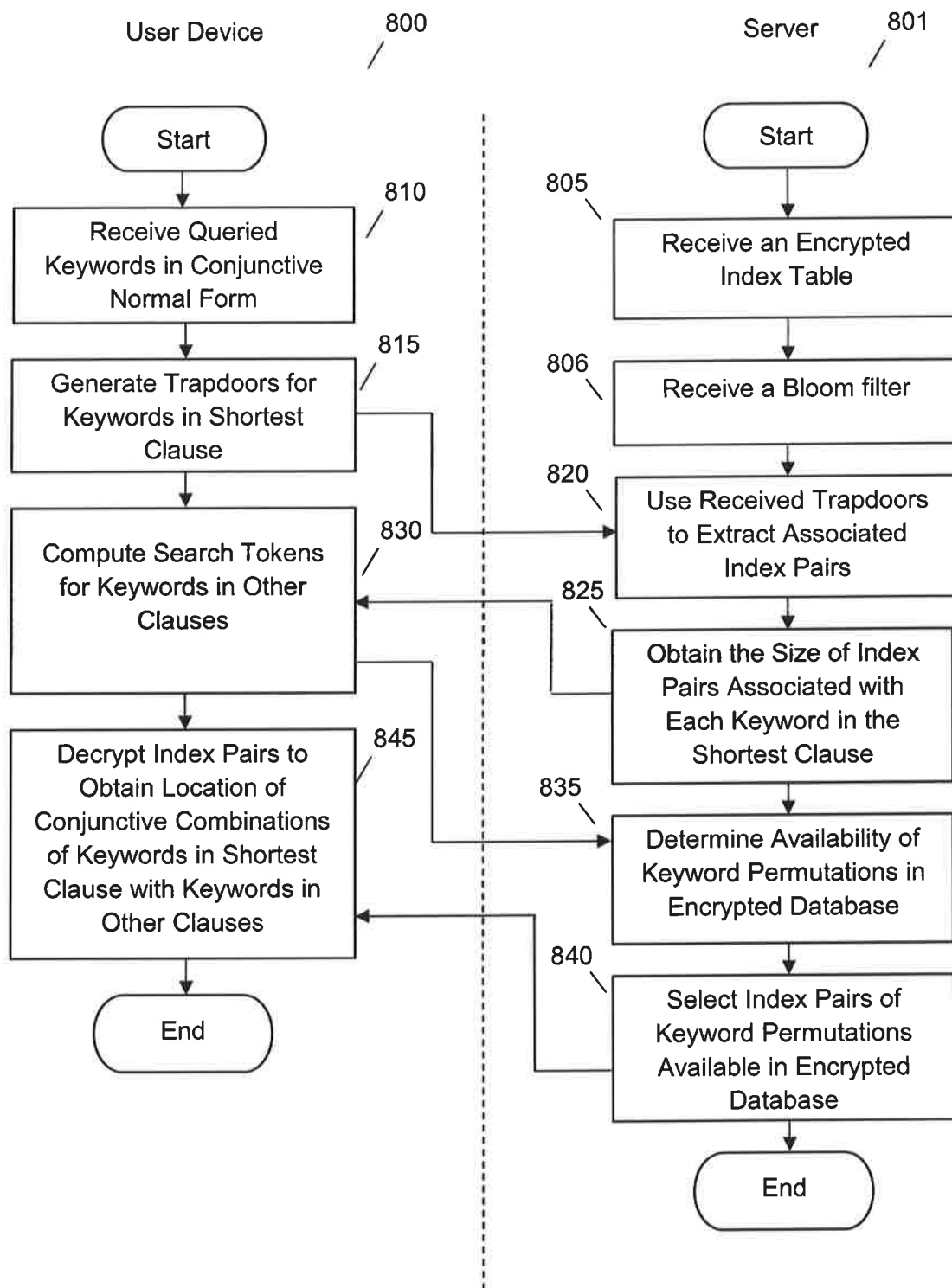
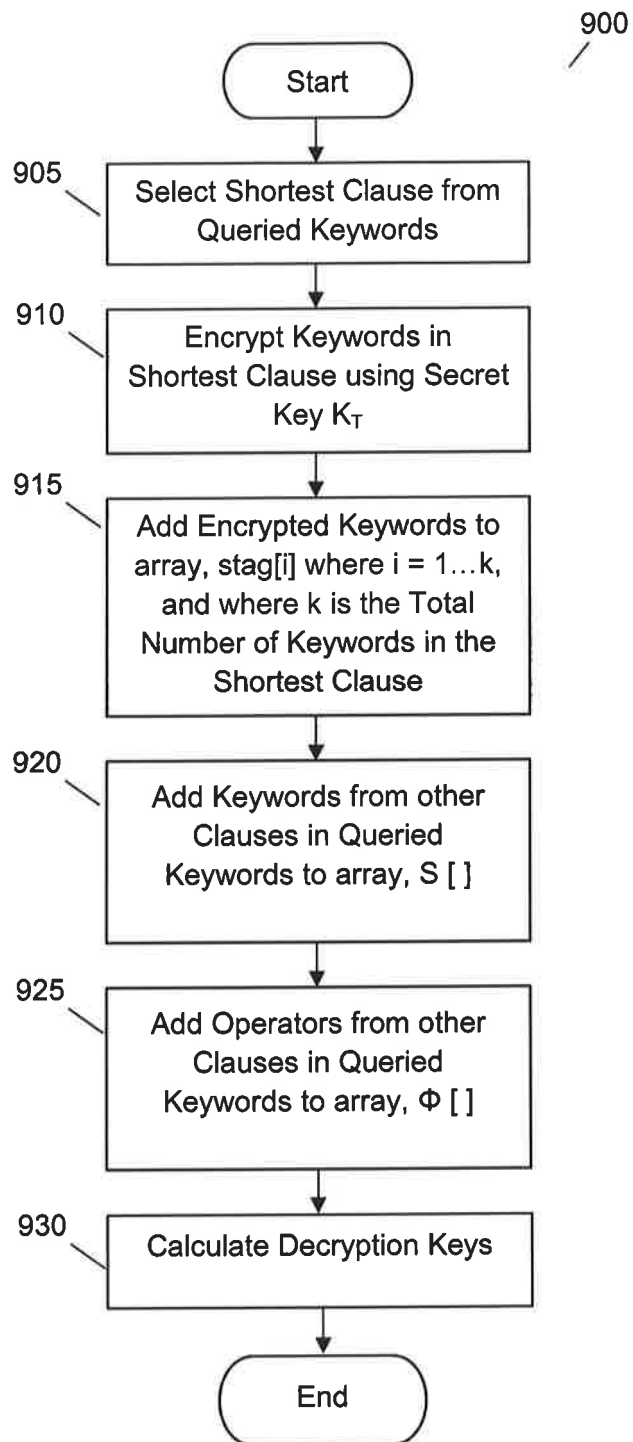


FIGURE 8

**FIGURE 9**

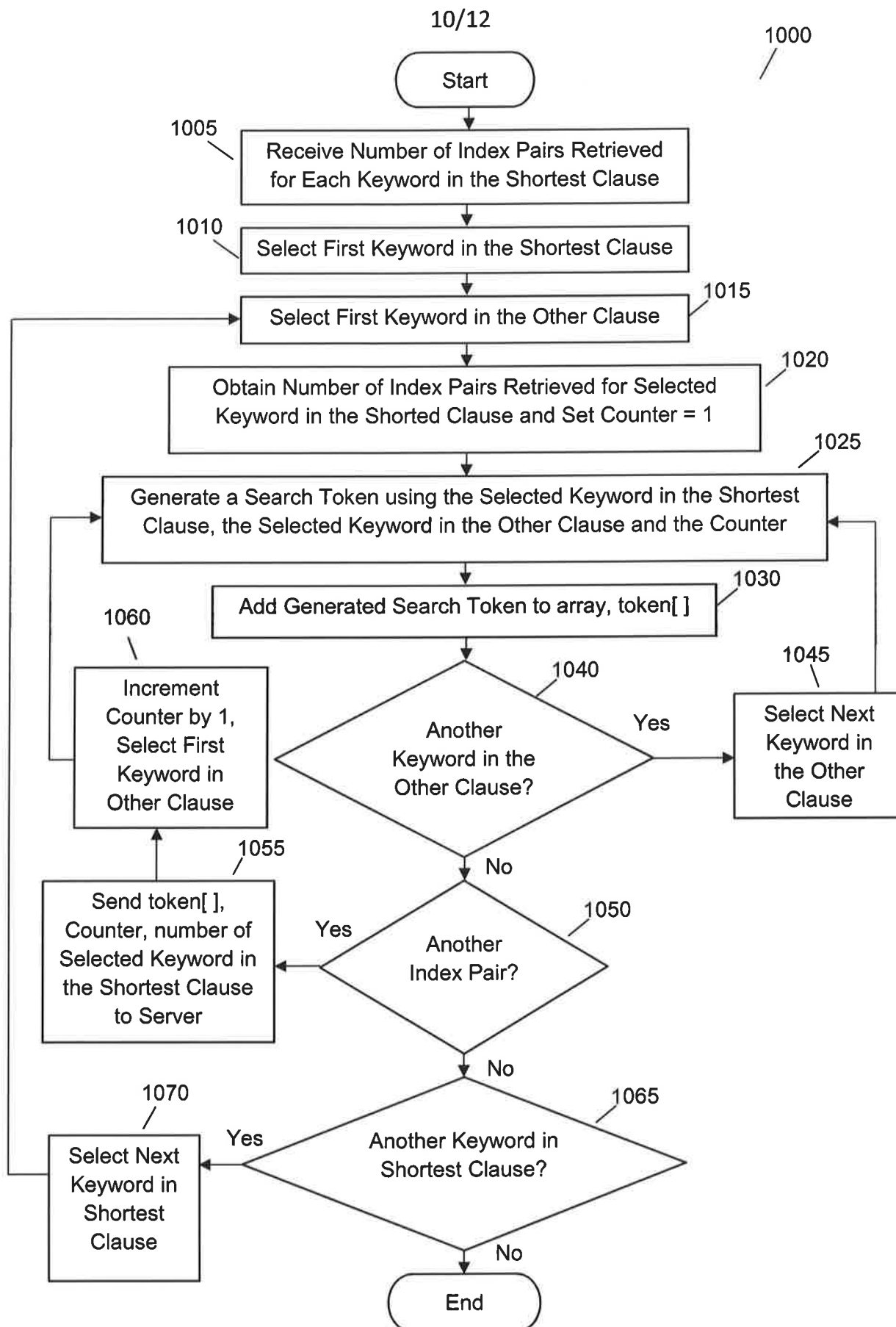


FIGURE 10

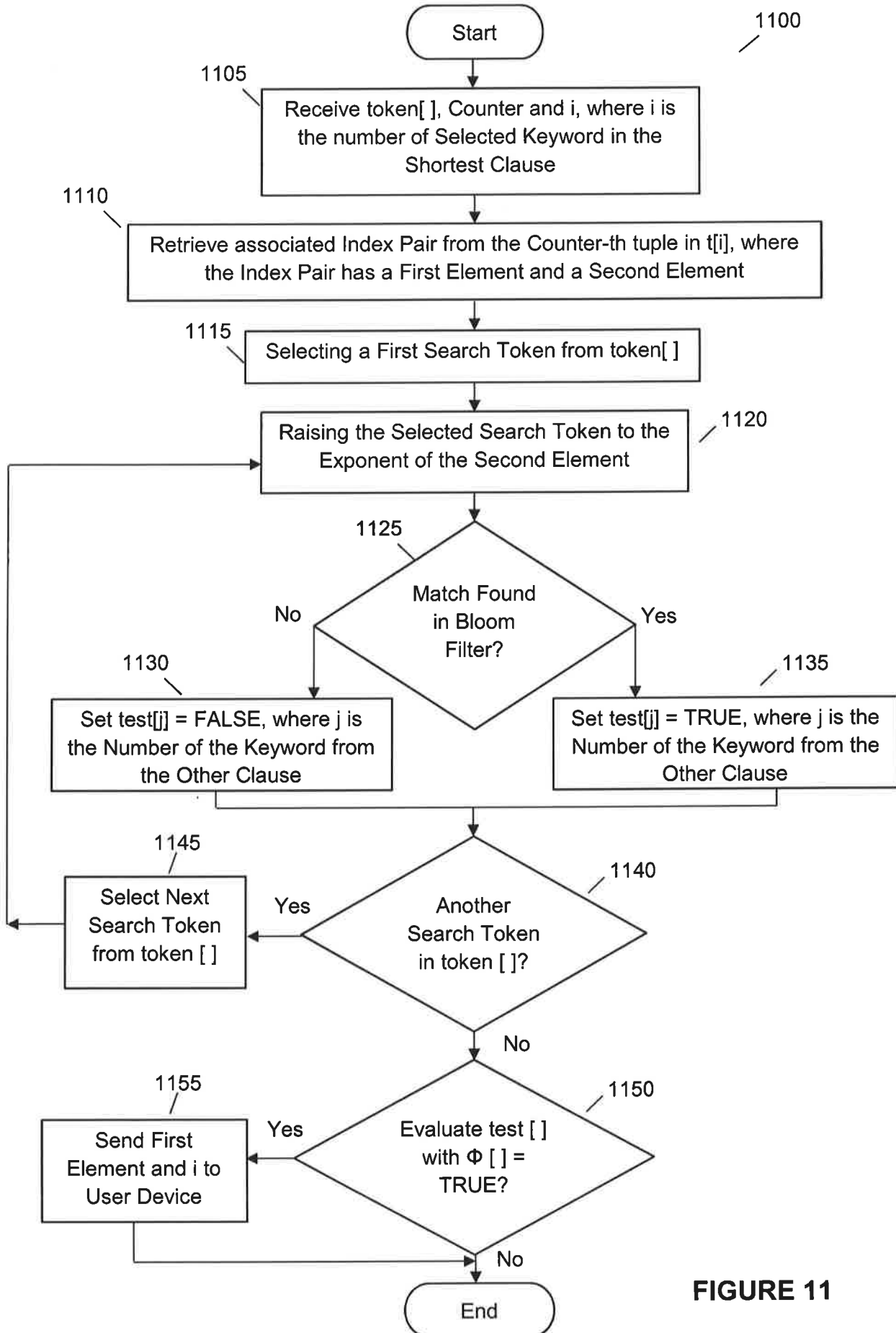
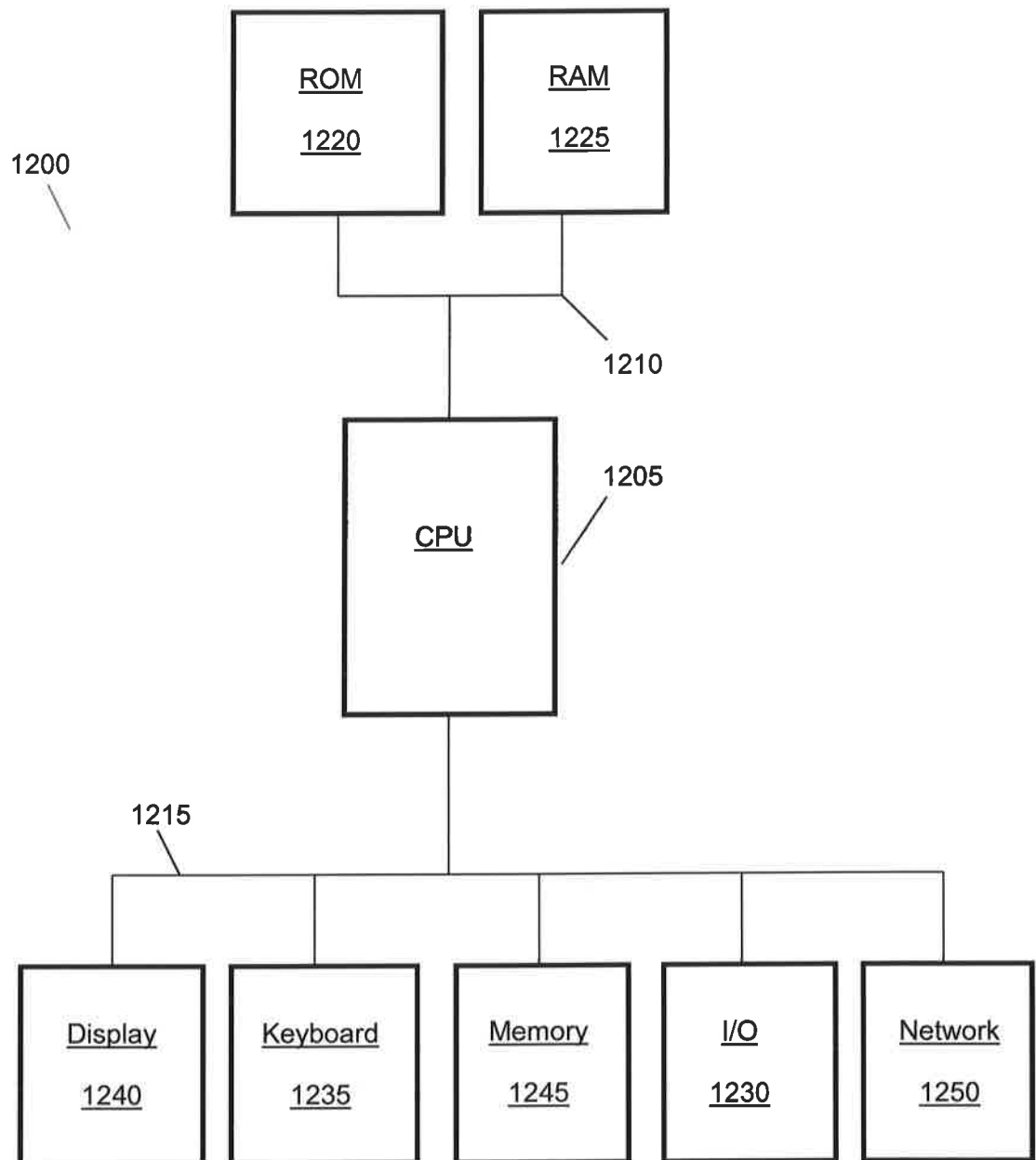


FIGURE 11

**FIGURE 12**