

# Multi-layer Coil

**Inductance** of a multi-layer coil of rectangular cross section can be computed by below formula when optimizing maximum distributed capacitance ( $C_{da} \times \times C_{do}$ ) and distributed inductance ( $D_{la} \times \times D_{ln}$ ) of Figure (7-3) to intensify **Inductance Field Strength** ( $FL_a \times \times FL_n$ ) to function as a voltage multiplier in switch-off conditions (612a  $\times \times$  612n), as illustrated in (710) of ~ . Figure (7-10) as to **VIC Coil Assembly** (580) of Figure (6-1) and, is expressed:

Figure (7-3)

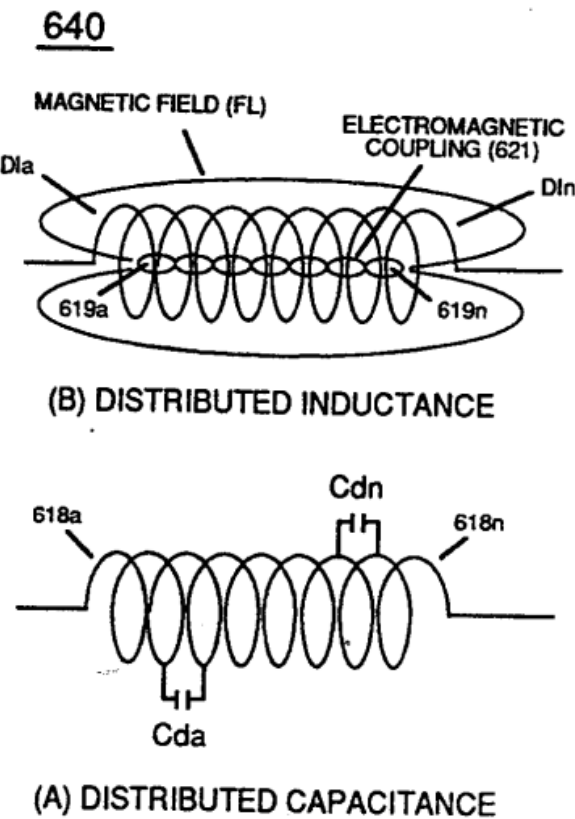


FIGURE 7-3: COIL INTERACTION

(710) of Figure (7-10)

710

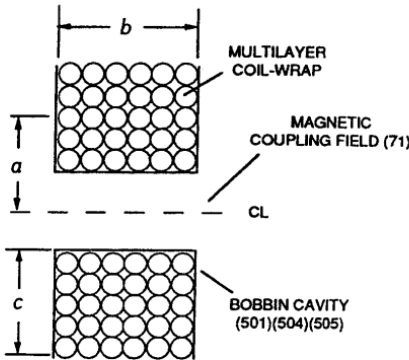


FIGURE 7-10: VOLTAGE STEPPING COILS

(580) of Figure (6-1)

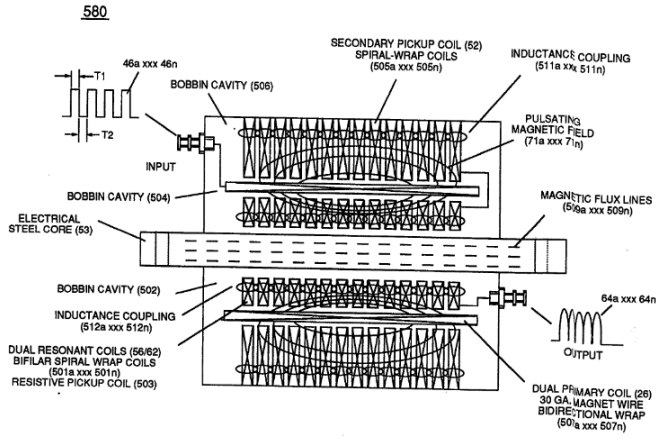


FIGURE 6-1: (VIC) COIL ASSEMBLY

(Eq 20)

$$L = \frac{0.8 (N \times A)^2}{6A + 9B + 10C} \quad \text{Bobbin Cavity}$$

Where,

(L) is the **inductance** in microhenries,

(N) is the **number of turns**,

(A) is the **mean radius** in inches,

(B) is the **length of the coil** in inches,

(C) is the **depth of the coil** in inches.

Revision #5

Created 13 December 2023 05:31:59 by Chris Bake

Updated 20 December 2023 04:43:51 by Chris Bake