
Mutual inductance between two wire contours. Two conducting wire contours, C_1 and C_2 , in air carry slowly time-varying currents of intensities $i_1(t)$ and $i_2(t)$, respectively, as shown in Fig. Q7.4. The mutual inductance L_{21} between the contours will not change if

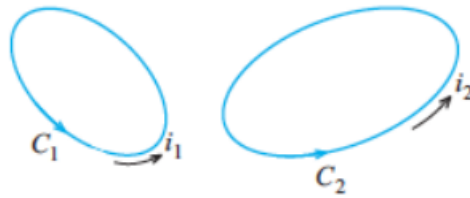


Figure Q7.4 Two wire contours with slowly time-varying currents in air; for Question 7.11.

- (A) the size of C_1 changes and C_2 remains the same.
- (B) the size of C_2 changes and C_1 remains the same.
- (C) both contour change in size.
- (D) both contour remain the same.
- (E) more than one of the above cases.

Solution: (D)

Answer: (D)