Khare and Pradhan Respond: In the preceding Comment, Michel[1] claims that our[2] $q=-\int d^4x\,\vec{E}\cdot\vec{B}$ and $s=\int d^4x\,(\vec{E}^2-\vec{B}^2)$ are not Galilean invariant. However, on using the expression in Ref. 2 it is easily seen that q and s are invariant under the Galilean transformation $t\rightarrow t+\tau$. As an illustration, by following the steps of Ref. 2 we find that under this transformation

$$q\rightarrow a^2\int_0^\infty k^4c_k^2\sin(2k\tau+2\alpha)\,dk\int_{-\infty}^{\infty}\cos(2kt)\,dt=\tfrac{1}{2}\pi a^2[\sin(2k\tau+2\alpha)k^4c_k^2]_{k=0}$$
$$=\tfrac{1}{2}\pi a^2\sin(2\alpha)(k^4c_k^2)|_{k=0}=q.$$

In this connection it may be noted that the factor α in our Letter cannot be transformed away by a time translation because different amounts of such translations would be required for different k contained in $\vec{E}$ and $\vec{B}$.

With regard to time integration, let it be noted that $\int_{-\infty}^{\infty}\sin(2kt)\,dt=0$ follows merely from the odd property of the integrand. One can also perform the integration and get

$$\int_{-\infty}^{\infty}\sin(2kt)\,dt=\lim_{T\rightarrow\infty}\int_{-T}^{+T}\sin(2kt)\,dt=\lim_{T\rightarrow\infty}\left(\frac{\cos(2kt)}{2k}\right)_{-T}^{+T}=0.$$

Michel's point that nonzero $\vec{E}\cdot\vec{B}$ is trivially obtained by superposing two propagating waves to form a standing wave is not new. In fact this point has already been noted by Chu and Ohkawa.[3]

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