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AT&T Bell Labs
Murray Hill, NJ 07974

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Dear Laurie:

When I visited Bell Labs last week, Bob Boie showed me the high speed position sensor he made using his radio wave technology and special antenna array. I think this is a really superb new device which is much better than anything previously existing for this purpose. Because of the principle on which it operates, one would expect it to be accurate and robust. The prototypes which Boie has constructed admirably fulfill these expectations. It also appears to be easy to manufacture.

I am particularly interested in exploiting the many possibilities for using this technology to control electronic musical instruments. For example, it would appear to be ideal for the drum-batons which are needed to control my conductor programs.

I would like to request that the Center for Computer Research in Music and Acoustics (CCRMA) at Stanford University become a beta test site for the development of musical applications for this technology. CCRMA is part of the Stanford Music Department and is also one of the world's leading computer music laboratories. Thus, it is in an ideal position to both develop and market digital musical products.

My initial efforts would be to adapt the conductor program to the RS232 connection which is the output from Boie's sensors so that they could be used with almost any personal computer. I believe that this adaptation would be enough by itself to provide a sufficiently large initial market for a musical product to pay for the startup production costs.

If you are willing to consider a beta test site agreement, I will ask our technology licensing department to negotiate the details with the appropriate person at Bell Labs whom you suggest.

I believe that developing the musical potential of this technology at CCRMA would benefit both AT&T and Stanford. I suspect that AT&T is not interested in marketing musical products but CCRMA, thanks to the FM synthesis techniques created by John Chowning, is eminent in this area.

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29 February 1988
Page 2

I am very excited by the musical potentials of the technology
so I very much hope that you will support this request and that
an agreement can be quickly set up.

Very truly yours,

Max V. Mathews

MVM/hmk