

Re: Focused sound

Source: <http://www.derkeiler.com/Newsgroups/sci.crypt/2004-08/1885.html>

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Date: 08/28/04

Date: Sat, 28 Aug 2004 00:50:29 +0000 (UTC)

In article <412f8c70\$0\$62398\$5fc3050@dreader2.news.tiscali.nl>, Dmitri Vikawtsky <Eddow@gmx.net> wrote:

>Mok-Kong Shen wrote:

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>> Dmitri Vikawtsky wrote:

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>>> Sound is nothing more than a wave, while you can "reflect" it with
>>> some material, you can make orientation-shaped 'sound-mirrors', like
>>> mirrors used in your torch, where a parabola mirror direct light beam.

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>>> These mirrors intended to give a unique orientation are just given a
>>> parabola shape.

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>> Do you happen to have an explanation why the firm concerned

>> does it in another, apparently much more complicated, way?

>> Thanks.

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>> M. K. Shen

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>Indeed, I forget a detail about sound :) That wave is a particles wave,
>while light is an electro-magnetic one. The point here is that 'perfect'
>mirrors for sound are kinda impossible at a pocket-torch size. Sound are
>for now well-reflected by walls of about 1 or 3m width. In other words,
>all is, even a bit, 'transluent' to sound. So, if you try to make a
>light-director with translucent paper, you'll have to put several papers
>in a complex way in order to achieve the best directing.

A short explanation of the complicated way of generating directed sound:
A beam of high frequency (much higher than audible) sound has a much shorter wavelength so it can be directed by reasonable-sized 'mirrors'. The would-be audible message is carried as the difference frequency between components of the high-frequency beam. Nonlinearity of the medium causes sum and difference frequencies to be generated, and you hear the difference frequency.

sci.crypt: Re: Focused sound

Not at all sci.crypt unless you think of it as acoustic steganography.

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