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22. The pyroelectric detector of claim 15 further comprising:

a detector electrode disposed on at least said detector region.

23. A multicell pyroelectric detector formed from a z-cut single crystal electret that is capable of detecting the position of a light beam comprising:

at least two domain regions located in a central portion of said electret having opposite polarizations;

a plurality of domain regions surrounding said central portion of said electret, said plurality of domain regions having a periodic pattern that substantially corresponds to wave patterns of at least one source of acoustic noise;

an electrode that covers approximately equal portions of said central portion and said plurality of domain regions so that charges generated by said at least two domain regions and said plurality of domain regions in response to said acoustic noise are combined to substantially null said acoustic noise, said electrode also providing a charge from said at least two domain

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regions indicating the amount of displacement of said light beam in said central region.

24. A multicell pyroelectric detector formed from a z-cut single crystal electret that is capable of detecting the position of a light beam comprising:

a first set of at least two domain regions in a central portion of said electret having opposite polarizations;

a second set of at least two domain regions having opposite polarizations that surrounds said central portion of said electret;

a plurality of needle domain regions disposed throughout said second set of said at least two domain regions surrounding said central portion of said electret, said needle domain regions reducing said acoustic noise.

25. The multicell pyroelectric detector of claim 18 further comprising:

a detector electrode deposited over said central portion.

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