

1)

RESEARCH STEEL PAN CAPTURE

The steel drum has been a problem to mic in a live situation or to record. To begin with this instrument is inherently loud, and the notes are omnidirectional even in the high frequencies. It is designed specifically to play to large crowds, which gives it a form of damping and compression that smooths out the sound. Therefore to capture it for proper recording or live sound, a certain amount of contouring and taming of the acoustic nature would have to be taken into consideration.

What I propose here is to take existing off-the-shelf hardware and software audio DSP, to recreate a clean high fidelity reproduction of the accumulated sound of the steel drum.



**THIS PROJECT CAN BE SUBJECT TO PATENT APPLICATION
LIMITED INFORMATION AVAILABLE**

STEEL PAN CAPTURE PROPOSAL	NAME	ROBIN IMAMSHAH
		

2)

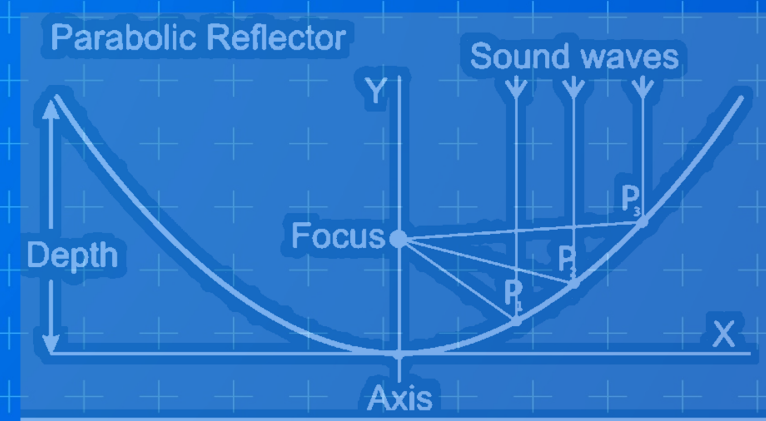
RESEARCH STEEL PAN CAPTURE

The unique property of a Parabolic shape is, all lines drawn from any point of the circumference to the centre are of equal length. This unique property when applied to sound gives us

- 1) The ability to pick up sounds from great distances, and
- 2) Flatten the frequency response within the given bandwidth.

Parabolic reflectors are normally used today in the (1) instance, To capture sound from great distances.

Sporting events using parabolic reflectors get into the voices of each player and the ball handling sounds of the game. This gives the audience in a live broadcast, an intimate experience of the event. One of the added benefits is the narrowing of the sound field. Enabling only where the reflector is pointed to be picked up. All adjacent sounds are greatly attenuated.



THIS PROJECT CAN BE SUBJECT TO PATENT APPLICATION
LIMITED INFORMATION AVAILABLE

STEEL PAN CAPTURE PROPOSAL	NAME	ROBIN IMAMSHAH
		

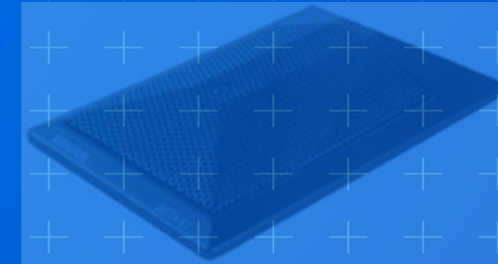
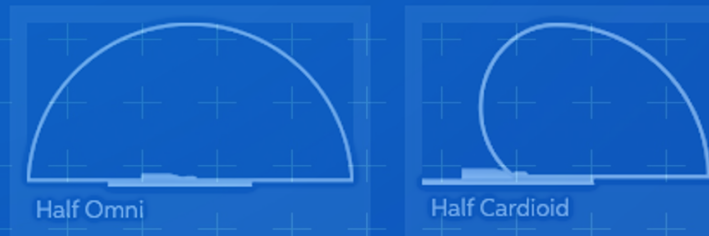
3)

RESEARCH STEEL PAN CAPTURE

The microphone that is needed in this situation would be unique in that it has to have a hemispherical pick up pattern.

▪ Boundary Mics

These rectangular flat microphones are often used in live performances to capture sound from the stage. A pressure zone microphone (or PZM) is inherently omnidirectional, but because of its flat shape, which places the element on the floor or another flat surface, the polar patterns are effectively cut in half, sometimes described as half-omni.



**THIS PROJECT CAN BE SUBJECT TO PATENT APPLICATION
LIMITED INFORMATION AVAILABLE**

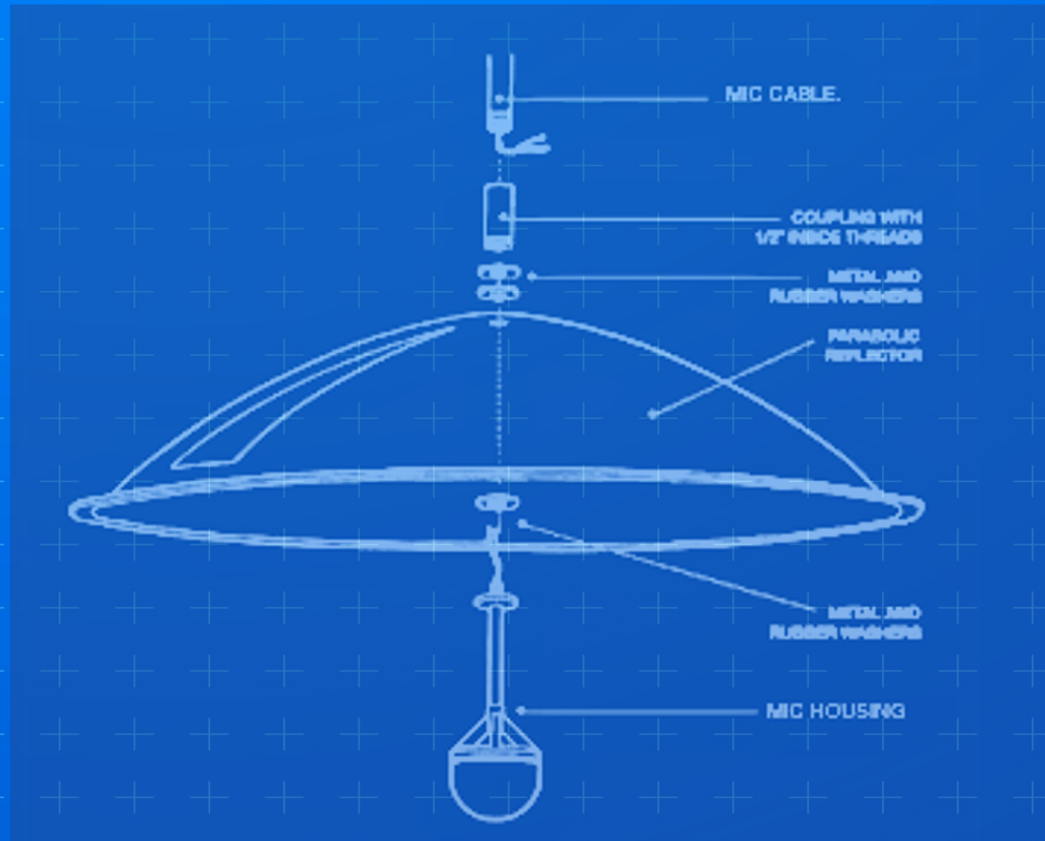
STEEL PAN CAPTURE PROPOSAL	NAME	ROBIN IMAMSHAH
		

4)

RESEARCH STEEL PAN CAPTURE

Test 1 rendering

THIS PROJECT CAN BE SUBJECT TO PATENT APPLICATION
LIMITED INFORMATION AVAILABLE



STEEL PAN CAPTURE PROPOSAL	NAME	ROBIN IMAMSHAH
		