

Indigenous ionizer for production of alkaline water

Title of Product/Process/Design/Equipment	Indigenous ionizer for production of alkaline water										
IPR Status Patent/Copyright/Trademark Secured in India/Abroad IPR Details	--										
Application/Uses	The ionizer is low cost import substitute technology that has numerous applications in production of therapeutic water for prevention of hyperacidity, diabetes, cancer.										
Salient Technical Features including Competing Features	<p>The innovatively designed cost effective ionizer has the capacity to produce 20 L alkaline water with pH 8.5 in 6 h; pH 9.0 in 12 h; pH 9.5 in 17 h.</p> <p>Alkaline water produced by the device is rich in antioxidant and minerals such as Ca, Mg, K etc. with an oxidation reduction potential of about -200 mV</p> <p>Designed device is very cost effective and is affordable by a common man unlike other ionizers that very expensive.</p> <p>The indigenous device is highly inexpensive compared to the ionizers available in the market. The Cost analysis shows that the commercially available ionizers are very expensive i.e., 40 times to 400 times the in-house developed ionizer.</p> <p>The cost comparison of bottled alkaline water with that of commercial ones reveal that the water cost produced from the in-house developed ionizer is < Rs></p>										
Level/Scale of Development	Lab Scale										
Environmental Considerations	Environmental friendly										
Status of Commercialization	Product not commercialized yet										
Major Raw Materials to be Utilized	Two plastic cans, membrane filter, electrode assembly										
Major Plant Equipment and Machinery Required	No major equipment required										
Techno-Economics	<p>Techno Economic Comparison of the proposed CSIR IICT Ionizer technology with market brands</p> <table border="1"> <thead> <tr> <th>Ionizer Brand</th> <th>Cost in Rs.</th> </tr> </thead> <tbody> <tr> <td>Hydrojal</td> <td>40000/-</td> </tr> <tr> <td>KYK HISHA Ionizer</td> <td>80123/-</td> </tr> <tr> <td>Panasonic TK-7585E</td> <td>86000/-</td> </tr> <tr> <td>Chanson Ionizer</td> <td>2,00,000 /-</td> </tr> </tbody> </table>	Ionizer Brand	Cost in Rs.	Hydrojal	40000/-	KYK HISHA Ionizer	80123/-	Panasonic TK-7585E	86000/-	Chanson Ionizer	2,00,000 /-
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	Leveluk Kangen 8	4,00,000/-
	CSIR-IICT	1500/-
	Bottled Water Brand	Cost in Rs. per Litre of bottled Alkaline water
	Bottled Alkame Water	2000/-
	QURE Alkaline Water	3000/-
	Neo Super Water – Alkaline	4529/-
	Essentia Drinking Water	1800/-
	AQUA hydrate Electrolyte Enhanced Water	2010/-
	CSIR-IICT	1.5
	Technology Package	Available

For further information please contact

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