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(54) TOILET WITH FOOT RESTING PLATFORM AND CISTERN

(57) The present invention relates to a toilet whose front side is higher than its rear, and that has foot rest platform integrated to its structure used by the individuals during the process of excretion.

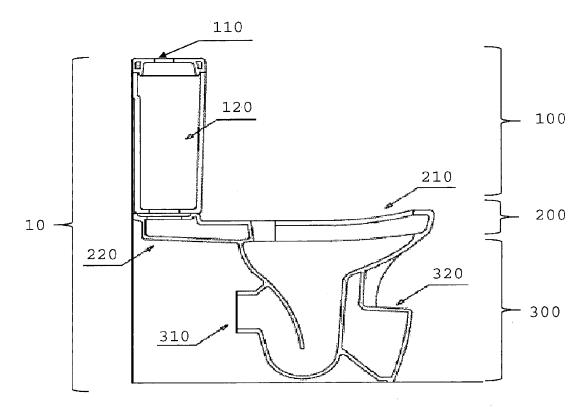


Figure 1

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Related Technical Field

[0001] The present invention relates to a toilet whose front side is higher than its rear, and that has foot rest platform integrated to its structure used by the individuals during the process of excretion.

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State of the Art

[0002] Human beings need energy in order to go on with their lives and for their daily needs. And in order to meet their energy needs, human beings take nourishment from various groups and in various quantities.

[0003] Digestion is the process of breaking down the nutrients taken to body through the oral route into basic units along the digestive tract. Necessary nutrient substances obtained as a result of the digestion process are mixed with blood in the required amount for the human body. Fibers, nonessential or detrimental substances for the body reach large intestine before they can mix up with blood. The liquid contained in these substances reaching the large intestine partly mix up with the blood flow and thus takes a more rigid form. As the resulting solid material advances its progress through the large intestine so-called fecal matter forms out of the wastes. This so called fecal matter is stored at the end of the large intestine. After a certain period of time, these substances are removed out of the human body by reflexes.

[0004] After nutrients are digested and absorbed, the process of removing waste materials left from digestion out of the body is called excretion or defecation. The process of defecation is triggered and carried through reflexes.

[0005] In order for defecation reflex to be triggered, the rectum must be filled with feces and the rectum walls must be stretched. Stretching of the rectum walls causes loosening in the normally contracted inner muscle around the anus. As a result of the relaxation of the inner muscle, substances that cause stretching inside the rectum advance downwards and come into contact with the tissue layer that contains nerve endings and cover inside of the anus and the reflexes are triggered. With the help of these reflexes individuals perceive whether the rectum is full or not. Perception data is transmitted to brain and individual decides whether to defecate or not.

[0006] The pelvic floor muscles inside the pelvis should relax along with puborectal muscles and the external muscle that surrounds the anus and functions voluntarily in order for defecation to occur. Thus, the angle between the rectum and the anus disappears and the defecation occurs with increasing of the abdominal pressure through straining.

[0007] Puborectal muscle which is one of the assistive muscles in the process of defecation is positioned in an anorectal angle in the human body. The puborectal muscle is only partially relaxed during the defecation done

by sitting. Due to the partially relaxed muscle, the feces in the rectum cannot be completely excreted from the stool channel. Feces left in the colon may accumulate over time and cause serious consequences such as cancer.

[0008] Individuals have developed a variety of ways to meet their needs of defecation over time and according to their location. For instance, earthenware utensils have been used as pots in households. The person who needed to excrete used to crouch and defecate in the pot. Because these pots were portable and mobile, individuals used to take their pots wherever they go and meet their needs of defecation in wherever they desired.

[0009] However, the need for cleaning these pots afterwards constituted another disadvantageous issue. After individuals had met their defecation needs they dumped what accumulated inside these pots in the streets and this resulted in the emergence of endemic diseases.

[0010] Pursuant to the problems encountered, pots were developed in design and were mounted on furniture such as chairs and thus human beings began to defecate in the sitting position. In time the usage rate of squatting toilets has decreased and people began to use toilet bowls known as flush toilets.

[0011] Although water closet type toilets have many users around the world, they have certain disadvantages. One of the most common problems of toilet users is the urine splashing through the gap between toilet seats and toilets which results in unsanitary circumstances. Particularly, considering the fact that a single toilet in public restrooms have multiple users, users of this particular single toilet may come into contact with other users' urine because of this splashing issue. A situation such as this may result in diseases and in cases where urinary tract infectious agents are very potent, the mentioned factors can cause fatal outcomes.

[0012] In the known state of the art, it has come notice that the use of disposable paper and plastic bags may prevent toilet seat users to come into contact with splashed urine on the toilet seat lids. According to the scientific studies, even though disposable paper and plastic bags have been shown to reduce the risk of developing diseases from splashed urine, these do not completely eliminate the possibilities.

[0013] Another one of the common complaints of the toilet users is the occurrence of numbness and tingling in the feet as a result of sitting at the same vertical position for a long time.

[0014] The utility model bearing number "CN2250718Y" relates to an auxiliary chair, which is preferably designed for children's use, and is suitable for the curved structure of toilet bowls. The said auxiliary chair has an elevated structure so that children can rest their feet and it allows children to reach the standard height of toilets. However, because these said chairs are not included in the design of toilets and moved closer and away from the toilets manually, children may slip and fall

while using the toilet seat.

[0015] The invention bearing number "US9809964B1" relates to a cover designed to solve the problem of urine splashing in toilets. The "U" shaped cover is compatible with the toilet bowl and utilized by covering the toilet seat lid prior to use. It has been proven by scientific studies that even though the said cover developed to prevent the user from coming into contact with splashed urine and the diseases it might cause has worked to some extent, it did not completely eliminate the possibility of contamination.

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Advantages of the Invention

[0016] The object of the invention is designing a foot rest positioned on the toilet bowl to ensure that user assumes the most appropriate defecation position while using the toilet seat by resting his/her feet on the said foot rest during the process of defecation and hence, providing the user a healthy environment for defecation.

[0017] Another object of the invention is to solve the urine splashing problem by raising the front side of the seating surface with the designed toilet.

[0018] Another object of the invention is to increase the sitting stability of the children during defecation with the foot rest platform integrated to the designed toilet.

[0019] Another object of the invention is to solve the problem of numbness and tingling that occurs in feet during defecation by elevating the front side of the designed toilet and providing a more comfortable seating experience.

Description of the Figures

[0020]

Figure 1. Side View of the Toilet Bowl with Foot Resting Platform and Cistern

Figure 2. Top View of the Toilet Bowl with Foot Resting Platform and Cistern

Figure 3. Top Sectional View of the Toilet Bowl with Foot Resting Platform and Cistern

Description of the References in Figures

[0021]

10. Toilet with Cistern

100. Cistern

110. Cistern Lid

120. Cistern Tank

130. Cistern Screw

140. Cistern Pipe

150. Cistern Button

200. Toilet Seat Platform

210. Toilet Seat Platform Front Side

220. Clean Water Inlet Channel

300. Toilet

310. Wastewater Outlet

320. Foot Resting Platform

321. Foot Resting Platform Front Side

322. Foot Resting Platform Rear Side

330. Toilet Hole

340. Toilet Screw Socket

11. Toilet with Cistern Front Side

Disclosure of the Invention

[0022] The present invention relates to toilet with cistern (10) which is used by individuals during defecation and whose front side (11) is higher than the rear.

[0023] Toilet with cistern (10) comprises of the cistern (100), toilet seat platform (200) and toilet (300). When the toilet with cistern (10) examined from the side; at the bottom level there is the toilet (300), in the middle there is the toilet seat platform (200) and at the top there is the cistern (100).

[0024] The cistern (100) which is located at the top of the toilet with cistern (10) comprises of the cistern lid (110), cistern tank (120), cistern screw (130) and cistern pipe (140). The cistern lid (110) is located at the top of the cistern (100) and prevents the entry of extraneous objects into the water contained in the cistern (100).

[0025] Inside the cistern (100) there is the cistern tank (120) which can hold water in various volume amounts. The utilization of the water in the cistern (120) for cleaning of the waste contained inside the toilet with cistern (10) is performed through the pipes located inside the cistern (100) that are connected to a cistern button (150) or through sensor-fitted systems.

[0026] To mount the cistern lid (110) to the cistern (100) cistern screws (130) are used. Screwing the cistern screws (130) which can be in various forms, on the cistern lid (110) makes the cistern lid (110) stationary during the use of cistern button (150).

[0027] In order for wafting the water contained inside the cistern tank (120) which is located inside the cistern (100) into the toilet (300) there are cistern pipes (140).

[0028] The toilet seat platform (200) which is located in the midsection of the toilet with cistern (10) allows the individual who is going defecate to sit to the toilet (300). Toilet seat platform (200) comprises of toilet seat platform front side (210) and clean water inlet channel (220).

[0029] The reason why the toilet seat platform front side (210) is higher is that to prevent splashing of urine from gap between the toilet seat platform (200) and toilet (300) while the user is urinating.

[0030] Clean water inlet channel (220) performs wafting of clean water in the cistern tank (120) to toilet (300) in order to clean the waste contained inside the toilet (300).

[0031] The toilet (300) whose side view resembles a cone shape is located at the bottom of toilet with cistern (10). The toilet (300) comprises of wastewater outlet (310), foot resting platform (320), toilet hole (330) and toilet screw sockets (340).

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[0032] Toilet screw sockets (340) that are located on the toilet (300) are the parts that connect the toilet seat platform (210) to the toilet (300) where the user sits on during the process of excretion. There are two toilet screw sockets (340) positioned between the toilet seat platform (210) and cistern (100). The wastewater outlet (310) is the channel where the wastewater that contains wastes coming from the inside of the toilet (300) mixed up with the clean water coming from the cistern (100) is discharged.

[0033] The toilet hole (330) is located at the bottom level of the toilet (300) and connected to the wastewater outlet (310). Wastes dumped to the toilet (300) after the defecation reach the wastewater outlet (310) through the toilet hole (330).

[0034] In order to prevent the continuous fetid odor coming from the wastewater outlet (310), wastewater outlet (310) is located higher than the toilet hole (330). There is a "U" shaped structure between the wastewater outlet (310) and the toilet hole (330) which is separated by a part that acts as a cover.

[0035] There are two feet resting platforms (320) on which the both feet can be rested on the front side of the toilet with cistern (11) which provide a healthy sitting position to the defecating individual. Foot resting platforms (320) are compatible with the inner volume of the toilet (300). Front side of the foot rest (321) is wide and the rear side of the footrest (322) is narrow.

Claims

1. The invention is a toilet with cistern (10) comprising of cistern (100), cistern lid (110), cistern tank (120), cistern screws (130), cistern pipes (140), toilet seat platform (200), clean water inlet channel (220), toilet (300), wastewater outlet (310), toilet hole (330), toilet screw socket (340), characterized by comprising a foot rest platform (320) that allows the defecating individual to assume a healthy sitting position, and that has a structure on which the user can rest both of his/her feet separately on the front side of the toilet with cistern (11), and that is compatible with the inner volume of the toilet (300), whose foot resting platform front side (321) is broader than the foot rest platform rear side (322) and that has a unibody structure with the cistern (100), toilet seat platform (200) and with the toilet (300).

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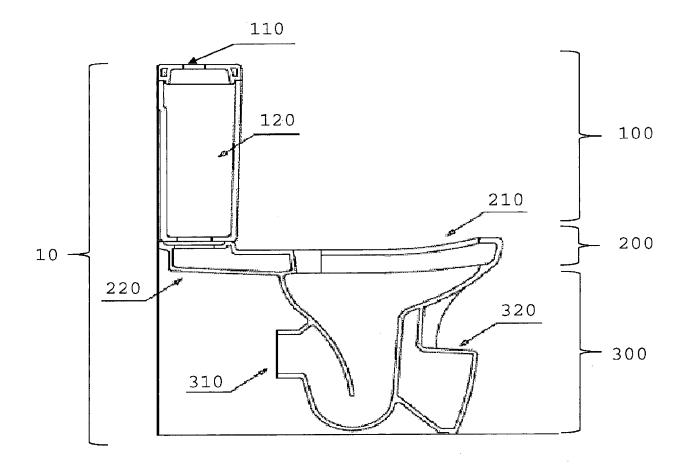


Figure 1

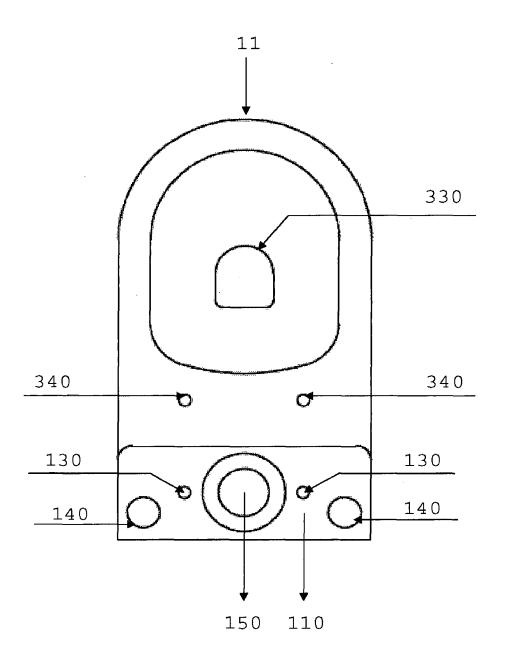


Figure 2

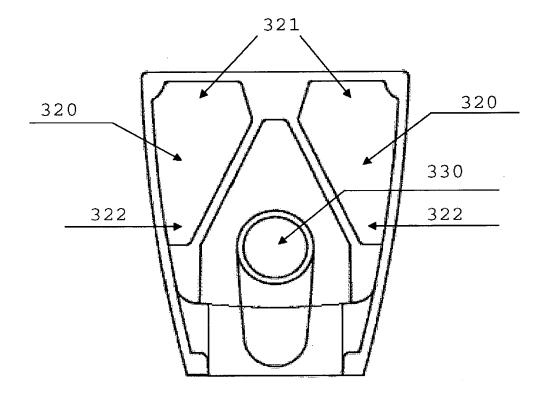


Figure 3



EUROPEAN SEARCH REPORT

DOCUMENTS CONSIDERED TO BE RELEVANT

Application Number

EP 18 00 0328

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3.82 (P	CATEGORY OF CITED DOCUMENTS
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- & : member of the same patent family, corresponding document

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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