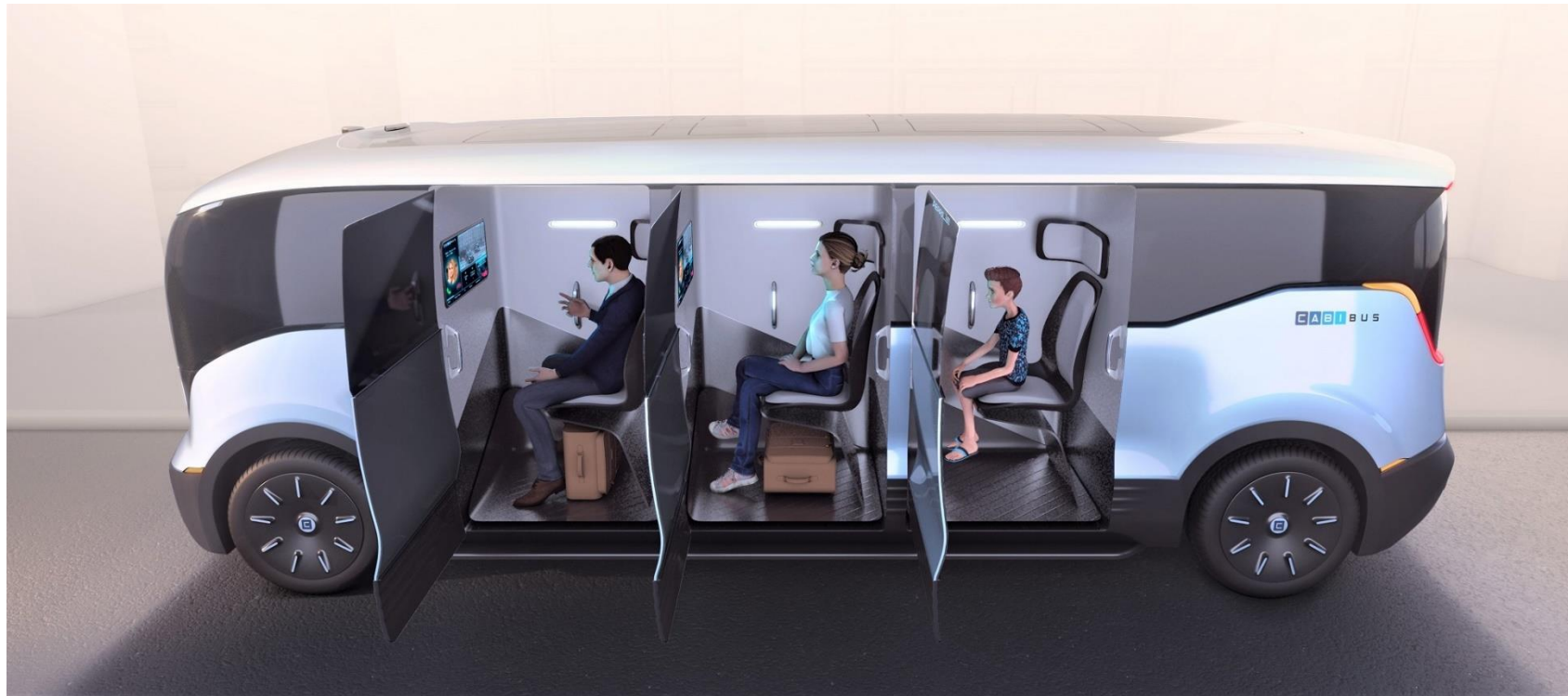


CABI BUS

Robotaxi with unique safety for shared mobility



CabiBUS Sustainable Mobility AB

CHALMERS

CabiBUS is the only shared Robotaxi vehicle concept that offers full protection against Sharing Anxiety according to researcher Sigma Dolins.

” In order for shared AVs (SAVs) to be a feasible service, users need to be willing to share a driverless space with strangers.”

Diagnosing Sharing Anxiety
Licentiate thesis, November 2021



Diagnosing Sharing Anxiety

Examining willingness-to-share factors and stakeholder involvement in on-demand ridehailing and autonomous vehicle contexts

SIGMA DOLINS

CABI BUS

”Numerous studies indicate that the potential of autonomous vehicles (AVs) to reduce greenhouse gas emissions, reduce traffic congestion, and increase mobility access **can only be fully realized through fleets of vehicles being used for shared rides**, also known as dynamic ridepooling. This has the potential for transforming the public transport industry, as well as how transportation functions in urban and rural contexts.”

Sigma Dolins, researcher at RISE, Gothenburg, Sweden

https://research.chalmers.se/publication/526508/file/526508_Fulltext.pdf

” However, the results showed that when presented with driverless scenarios, the focus group participants’ willingness-to-share dropped significantly, due to strong concerns about the unknown behaviour of their co-passengers. This revealed “sharing anxiety” in even extremely motivated users of dynamic ridepooling, and a potential barrier to the deployment of SAVs (Shared Autonomous Vehicles).”

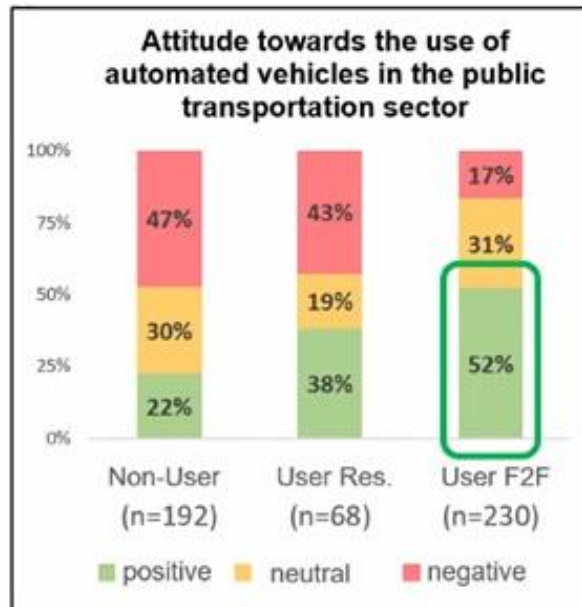
Sigma Dolins, researcher at RISE, Göteborg

<https://www.cabibus.com/sharing-anxiety.html>

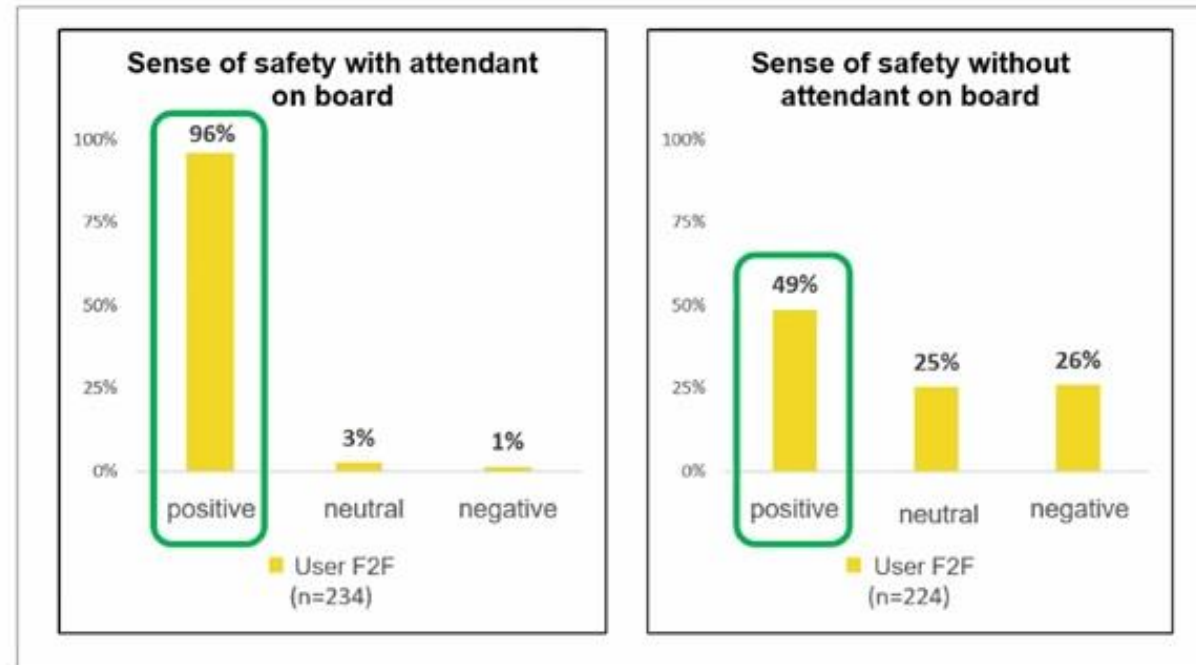
<https://www.cabibus.com/privacy-1.html>

What have we learned about user acceptance and trust?

Results from acceptance study with passengers and residents by the ZTG - 'Center for Technology and Society' of the Technische Universität Berlin within the project scope of "Shuttles & Co":



* Res. = Results from survey with residents
F2F = Results from survey with passengers

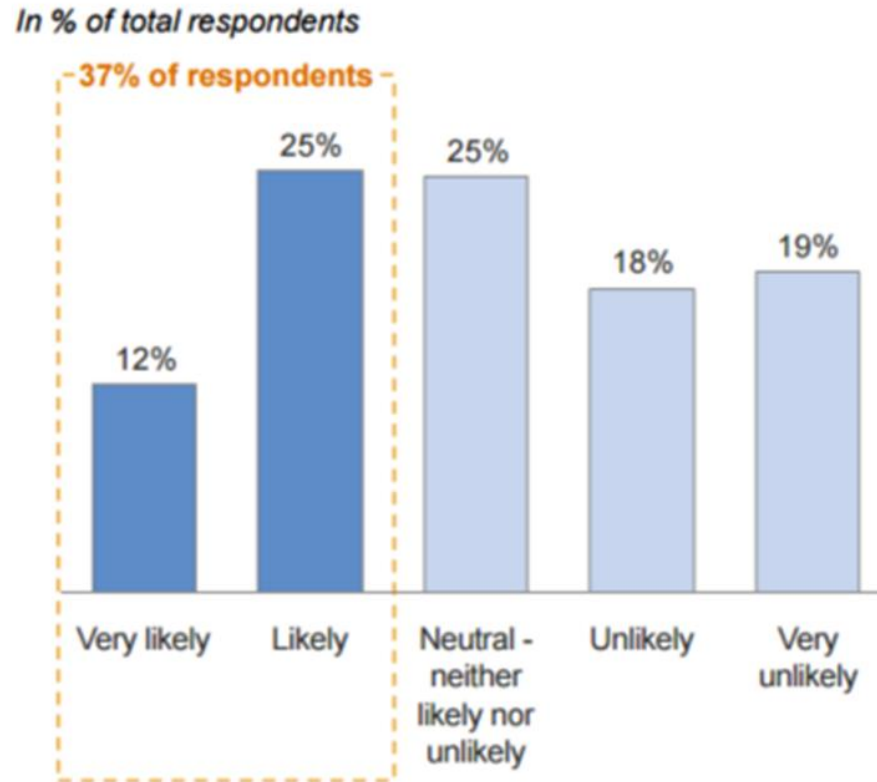


CabiBUS is the only shared Robotaxi design that offers full sense of safety without attendant on board

Safety for travelers will be crucial to become the market leader in autonomous passenger transport.

C A B I B U S

6 Consumers are more reluctant to share a self-driving taxi with strangers



Q: How likely are you to consider using a **shared self-driving taxi**?

n = 5,635



"It is not safe for a lady to share with strangers."
Janice, 39

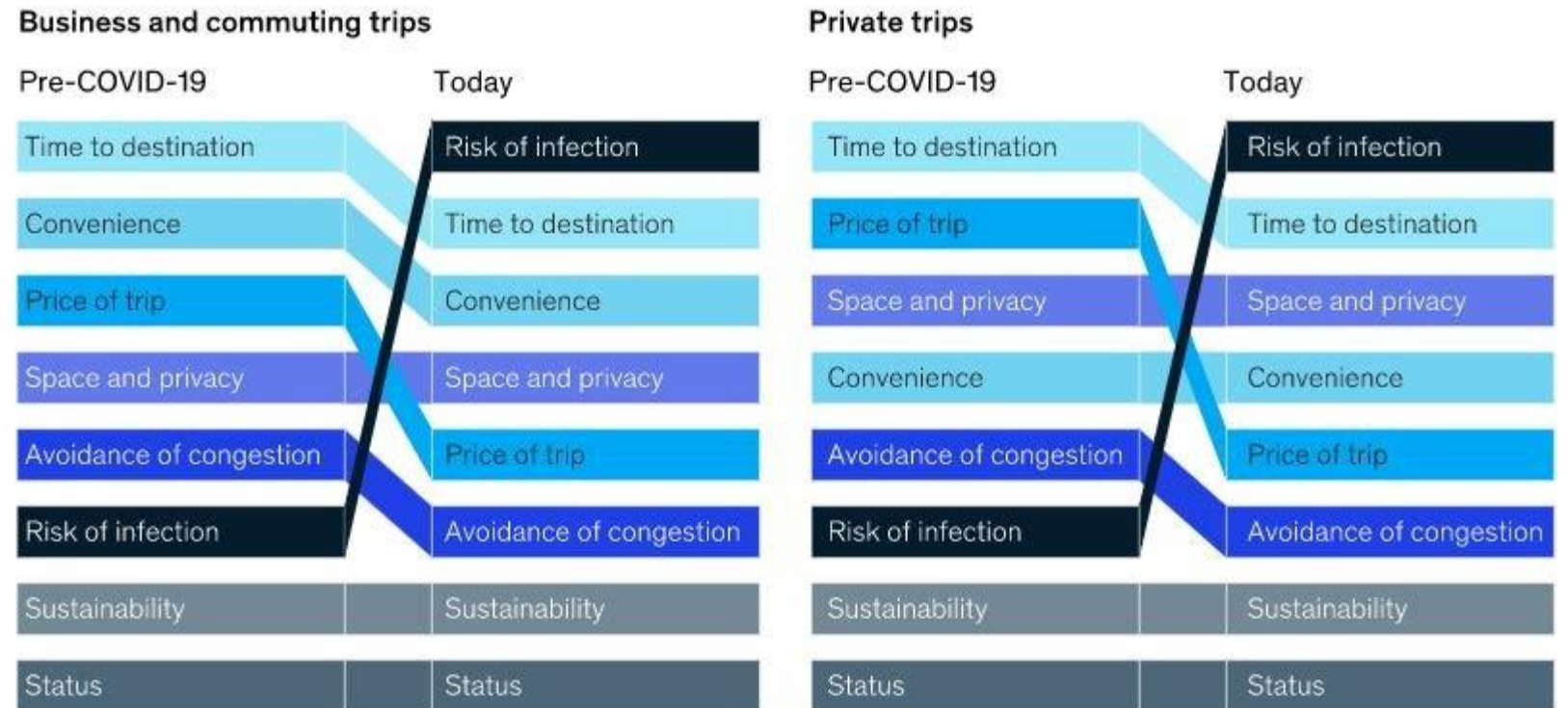
"Who will maintain the car if it gets dirty?"
Keryn, 32

"Me, as a woman, I would never want to share a ride with three drunk guys at night"
Jennifer, 26

CabiBUS is the only shared Robotaxi vehicle concept that offers full protection against infection from other passengers.

Reducing the risk of infection has become the primary reason for the choice of a mode of transportation.

Key reasons to choose a mode of transportation,¹ rank



¹Question: What were/are your key reasons to choose a mode of transportation? Aggregated results from China, France, Germany, Italy, Japan, UK, and US. Reasons ranked by number of respondents. Source: McKinsey Center for Future Mobility

Patent applied for 2014, granted 2018

” Because each passenger has their own separate space in the vehicle, the risk of being exposed to infection, theft or violence from other passengers is eliminated and there are good conditions for undisturbed work, which makes travel time more efficient.”

More patents covering details in the unique vehicle concept will be applied for to achieve substantial international protection.

CABI BUS



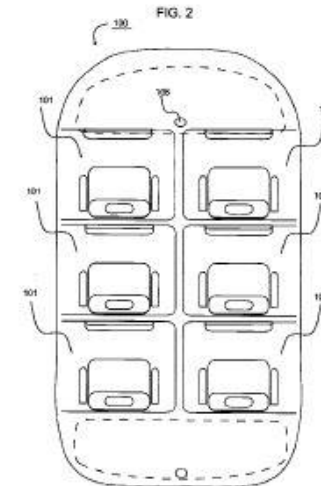
(12) Patentskrift

(10) SE 540 622 C2

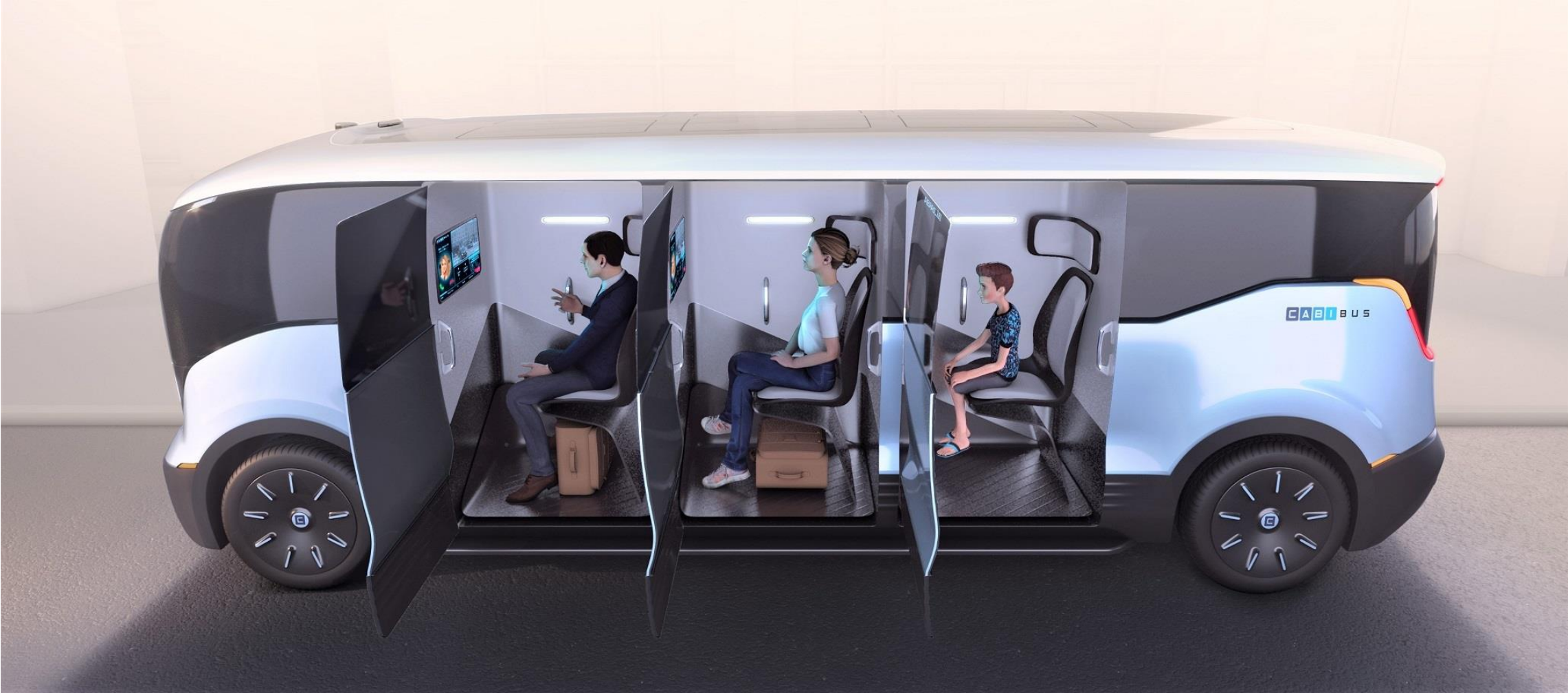
(21) Patentansökningsnummer:	1430082-6	(51) Int.Cl.:	
(45) Patent meddelat:	2018-10-02	B62D 31/00	(2006.01)
(41) Ansökan allmänt tillgänglig:	2015-12-10		
(22) Ingivningsdag:	2014-06-09		
(24) Löpdag:	2014-06-09		
(30) Prioritetsuppgifter:	---		

(73) Patenthavare:	Kenneth Palmestål, Blodboksgatan 24, 42674 Västra Frölunda SE
(72) Uppfinnare:	Kenneth Palmestål, Västra Frölunda SE
(74) Ombud:	---
(54) Benämning:	Fordon för transport av flera passagerare i skilda utrymmen
(56) Anförda publikationer:	US 4582354 A1 · WO 2011154681 A1 · WO 2008033540 A2
(57) Sammandrag:	

Den föreliggande uppfinningen avser ett fordon med en anordning för automatisk drift utan förare (100) för persontransport kännetecknat av att nämnda fordon innefattar ett antal kupéer (101), och har egen dörr(102) för in- och utstigning samt säte (103) för en passagerare så att varje passagerare reser avskild från övriga passagerare och därmed får en tryggare, bekvämare och effektivare resa.



CabiBUS 6+1 cabins offers safe and comfortable shared rides for all.



CABI BUS



Other Robotaxi examples:

Waymo

Cruise

Zoox

CabiBUS patented solution with individual and exchangeable cabins is the only solution that offers full privacy, safety and security when sharing rides with strangers.

"Hello Kenneth, Your technology looks great"

Julia Bauer, Head of Sustainability at

[Nico Rosberg](#)

**Sustainability Entrepreneur & Formula 1 World
Champion**

Now is a perfect time to start developing CabiBUS!

Level 4 autonomy: 10 August 2023 Waymo is now [authorized](#) to collect fares for driverless rides in San Francisco! 15 March 2024, Waymo now drive also on freeway!

Cities starts to plan for public transit with Shared Autonomous Vehicles, SAV:
IAA Mobility, 5 September 2023Oslo, Norway presented plans for 20 000 SAVs to reduce the car traffic with 50% to 2030.



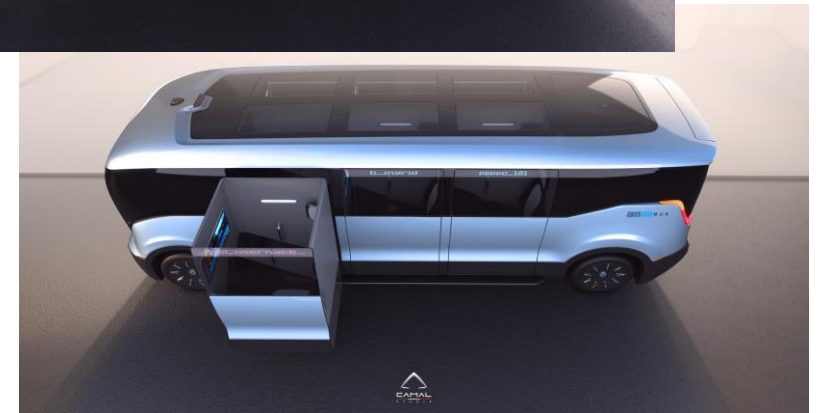
Last miles deliveries

On evenings and weekends, there is less need for passenger transport and most people are at home and can receive deliveries of parcels and food (also chilled and frozen).

The patented solution with exchangeable cabins makes it possible to use the same vehicle. It is a perfect combined use.

The cabins are prepacked for a certain area at the different companies and then picked up by the CabiBUS.

Increased utilization of vehicles provides better economy and reduces the need for resources to manufacture vehicles and batteries.



CABI BUS

Financing

The initial financing is required to hire a professional team, a CEO with successful experience of building and scaling a startup, and a CTO with experience from leading a vehicle development from start. It will require €0,4M-0,5M to get this first team on board. The investment may be conditional on the successful recruitment of a competent team.

Here in West Sweden, with Volvo and NEVS (earlier the SAAB car factory), there is a huge competence in vehicle development. NEVS have a Robotaxi prototype, Sango, and Zeekr has developed the M-Vision Robotaxi for Waymo.

The second financing is for developing and building the first prototype, €5M-€10M

A possible third step is similar as Cruise and Zoox, a global company like Ford or Apple buys CabiBUS Sustainable Mobility AB at a billion-dollar valuation.

But the most profitable long-term business is to establish mobility and transport services globally.

<https://www.adlittle.com/en/insights/viewpoints/robotaxis-disrupt-market>

<https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/the-road-to-affordable-autonomous-mobility>



Kenneth Palmestål, founder

Engineer, inventor, entrepreneur.

Human ecology studies at Gothenburg University 1974-1975.

Patent for IQtherm smart thermostat 1987. CEO until business sold 1999. http://iqtron.se/IQtherm_eng.htm

Patent for SoundRacer gadget for Sports Car engine sound in ICE cars 2008, CEO and largest owner. www.soundracer.com

Product developed for electric vehicle warning sound, AVAS, now factory installed in Solaris buses and Rimac Nevera Hypersportscar. www.evsoundsystem.com

Patent for CabiBUS applied for 2014, granted 2018. Founded the CabiBUS Sustainable Mobility AB.

Plan: Build a multi-country patent portfolio on the new technical solutions in the CabiBUS vehicle.



TARGET 11-2



Our mission

11 Sustainable Cities And Communities

Make cities and human settlements inclusive, safe, resilient and sustainable

11.2 AFFORDABLE AND SUSTAINABLE TRANSPORT SYSTEMS

By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

CabiBUS vehicle



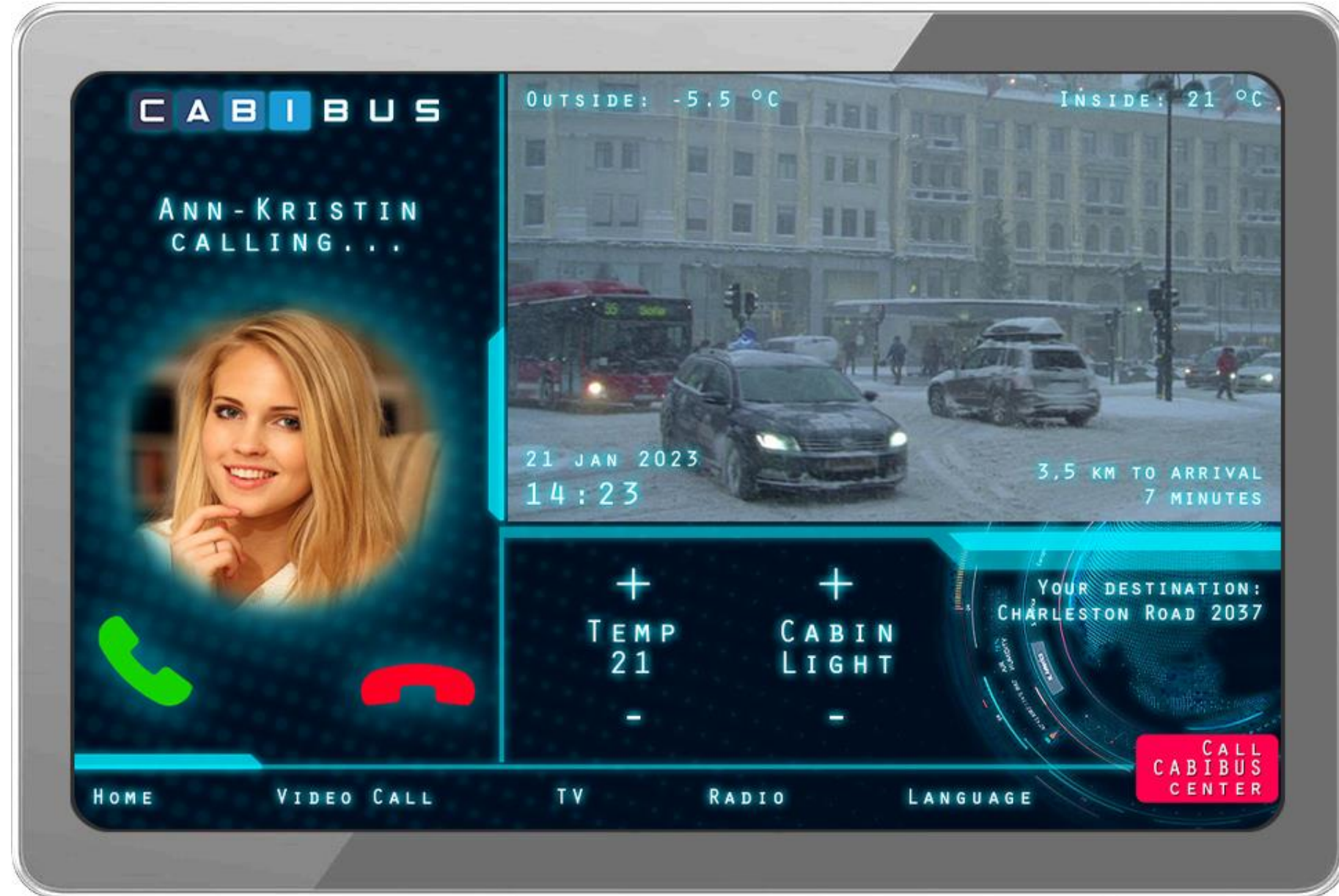
C A B I B U S

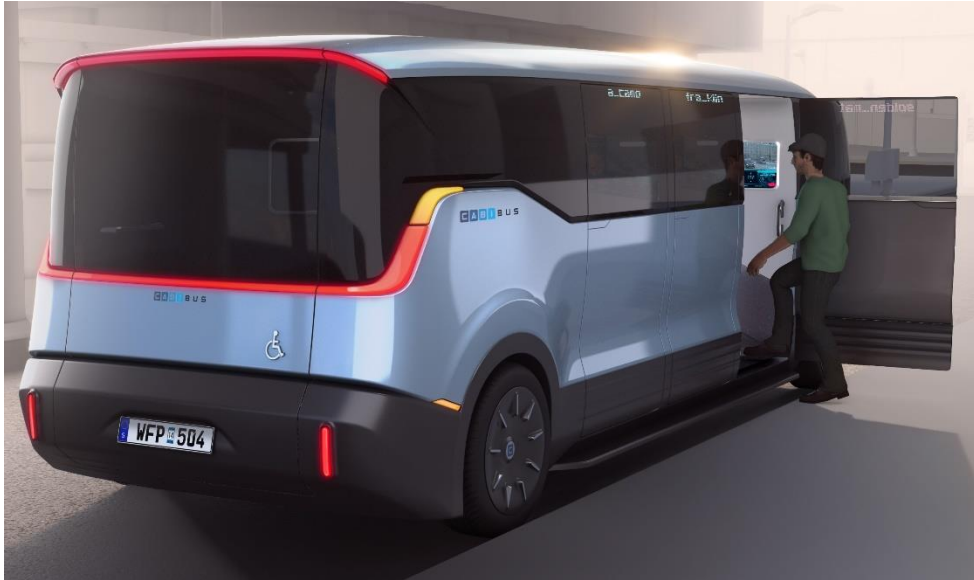
630x200x200 cm



Touch screen functions

- forward view
- video call
- Information
- light and temperature settings
- emergency call
- TV, stream, radio ...





- Autonomous Level 4
- Electric
- 6 private cabins for one or two persons.
- 1 Wheelchair/baby stroller/baggage cabin
- Safest shared travel for all passengers through
Separate fresh filtered air to each cabin
UV-C light virus disinfection after each passenger
Airbags all around in each passenger cabin
Strong framework between and around all cabins.
- Battery range 500 km. Top speed 110 km/h
- Door2door, on-demand
- Cover up to 100 km around each city

Full size cabin prototype shows the spacious private cabin that allows two persons to share the ride.

A cabin is not shared with other passengers, only with two persons travelling together.

There is also room for shopping bags and baggage.

Private cabin enables travelling with a dog without disturbing other passengers (booking system can help allergic persons avoid cabins that has had a dog inside).

Total CabiBUS capacity is 12 persons in 6 cabins plus one wheelchair passenger in rear cabin.

CABI BUS



All required technology is available from suppliers like these.

CabiBUS will be designed so that the best Level 4 autonomy system can be selected at production start. Also possible to select system for different countries.

PARTNER WISH LIST This is a dreamteam of companies that we hope to partner with to create the best 1-100 km shared mobility vehicle and public transit in the world.



WAYMO autonomous Level 4 technology



AURORA autonomous Level 4 technology



WAYVE The next wave of AV technology.



SoundRacer Acoustic Vehicle Alerting System, AVAS



northvolt Batteries



Rimac EV technology



ERICSSON Telecom 5G connected vehicles



SKF Bearings



GHSP UV-C disinfection



NVIDIA DRIVE platform



CAMAL STUDIO Vehicle design and visualisations



MAGNA Vehicle development and production



Autoliv Airbags



TESLA EV Driveline



Buses GLOBAL VOLVO Buses Global supplier of public transportation



NEVS Vehicle prototype and production



NAWATECHNOLOGIES ULTRACAPACITORS



Phantom Auto Teleoperation solution



ROCSYS charging robots



ClearMotion Proactive suspension technology



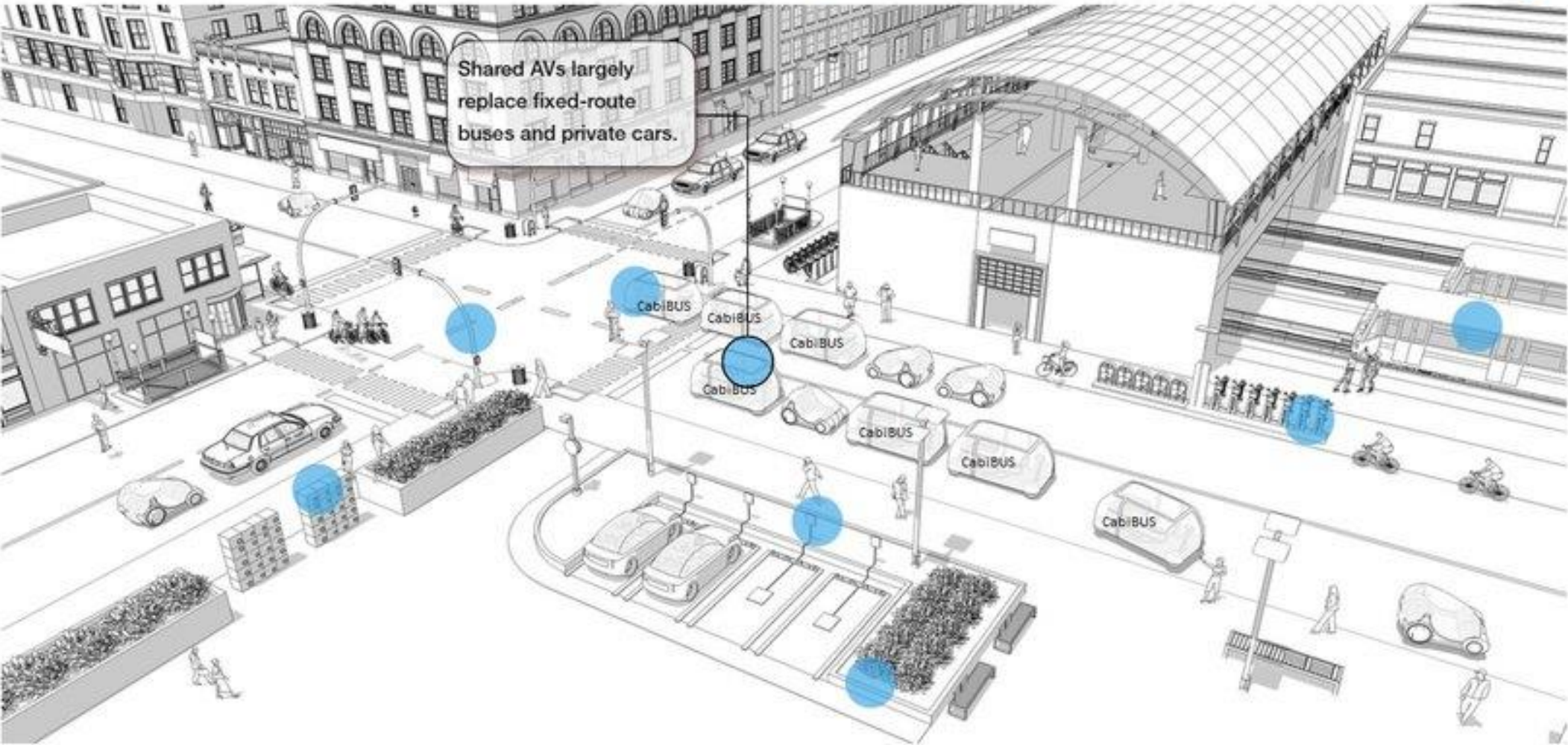
CHASSIS AUTONOMY Fail-operational Steer-by-wire and Brake-by-wire



BraunAbility Wheelchair lift design



Scenario 3 shows a typical intersection under seamless mobility in 2030.



McKinsey & Company



(CabiBUS text on AV vehicles added by CabiBUS)



Just a suggestion, Västtrafik is not a partner (yet)

CabiBUS Sustainable Mobility AB

Kenneth Palmestål, kenneth@cabibus.com

+46706906090

www.cabibus.com

Gothenburg, Sweden

